

**Peter P. Sena III**  
Site Vice President

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January 21, 2008  
L-08-027

ATTN: Document Control Desk  
U. S. Nuclear Regulatory Commission  
Washington, DC 20555-0001

SUBJECT:  
Beaver Valley Power Station, Unit No. 1  
Docket No. 50-334, License No. DPR-66  
Eighteenth Refueling Outage Inservice Inspection Report

Enclosed please find the Inservice Inspection (ISI) Summary Report on American Society of Mechanical Engineers (ASME) Class 1, 2, and 3 examinations performed prior to and during the eighteenth refueling outage at Beaver Valley Power Station Unit No. 1 (BVPS-1). The ASME Boiler and Pressure Vessel Code, Section XI, Article IWA-6230 requires an inservice inspection summary report to be submitted to the enforcement and regulatory authorities having jurisdiction at the plant site within ninety days of the completion of the inservice inspection conducted during each refueling outage. The recent inservice inspection term at BVPS-1 covered the period from April 20, 2006 to October 24, 2007.

The Class 1, 2, and 3 examinations are part of Interval 3, Period 3 of the BVPS-1 ISI schedule, and were performed in accordance with Section XI of the ASME Boiler and Pressure Vessel Code, 1989 Edition.

There are no regulatory commitments contained in this letter. If there are any questions or if additional information is required, please contact Mr. Thomas A. Lentz, Manager – FENOC Fleet Licensing, at 330-761-6071.

Sincerely,



Peter P. Sena III

Enclosure

A047

NER

Beaver Valley Power Station, Unit No. 1  
L-08-027  
Page 2

c: Mr. S. J. Collins, NRC Region I Administrator  
Mr. D. L. Werkheiser, NRC Senior Resident Inspector  
Ms. N. S. Morgan, NRR Project Manager  
Mr. J. Payton, Commonwealth of Pennsylvania

BEAVER VALLEY POWER STATION UNIT 1  
Route 168, Shippingport, PA

Outage 18, Year 2007

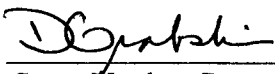
Inspection Term: 4/20/2006 to 10/24/2007

Issue date: 1-11-08

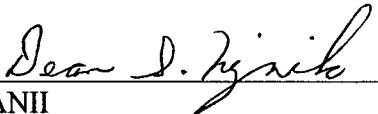
Owner: FirstEnergy  
76 South Main St.  
Akron, OH 44308

NRC Docket Number: 50-334

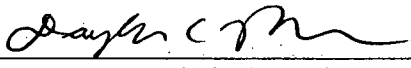
Reactor Supplier: Westinghouse Electric Corporation  
Commercial Service Date: September 30, 1976

Reviewed by:  for JAS per telecon  
Supv, Nuclear Programs

Date: 1/9/8

Reviewed by:   
ANII

Date: 1-11-08

Approved by:  D.C. Reeves  
Manager, Technical Services Engineering

Date: 1-11-08

**90-DAY REPORT  
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**FORM NIS-1 OWNER'S REPORT FOR INSERVICE INSPECTIONS**  
**As required by the Provisions of the ASME Code Rules**

1. Owner FirstEnergy Nuclear Operating Company, Route 168, Shippingport, PA 15077  
(Name and Address of Owner)

2. Plant Beaver Valley Power Station, Route 168, Shippingport, PA 15077  
(Name and Address of Plant)

3. Plant Unit 1 4. Owner Certificate of Authorization (if required) N/A

5. Commercial Service Date 9/30/76 6. National Board Number for Unit N/A

7. Components Inspected

Component or Appurtenance	Manufacturer or Installer	Manufacturer or Installer Serial No.	State or Province No.	National Board No.
Reactor Vessel	Combustion Engineering	69103	105642B	21011
Pressurizer	Westinghouse	1311	434676V	68-50
1A Steam Generator	Westinghouse	NP030651/1MB2	591601V	82
1B Steam Generator	Westinghouse	NP030651/2MB2	591602V	83
1C Steam Generator	Westinghouse	NP030651/3MB2	591603V	84
1A Reactor Coolant Pump	Westinghouse	1-618J931G01	N/A	N/A
Reactor Coolant Piping	Southwest Fabricating	N/A	N/A	N/A
Auxiliary Piping	Schneider Power	N/A	N/A	N/A
Loop Stop Valve MOV-IRC-595	Rockewell International	7517	N/A	N/A
Relief Valve RV-IRC-551A	Target Rock	69A	N/A	N/A
Relief Valve RV-IRC-551B	Target Rock	69B	N/A	N/A
Relief Valve RV-IRC-551C	Target Rock	69C	N/A	N/A
RHR Heat Exchanger RHE-1A	Joseph Oat	1832-1	434682V	368
Low Head Safety Injection Pump SI-P-1B	Ingersoll - Dresser	0671-140xxxxx	N/A	N/A

Note: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8½ in. x 11 in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

This form (E0029) may be obtained from the ASME Order Dept., 22 Law Drive, Box 2300, Fairfield, NJ 07008-2300

FORM NIS-1 (Back)

8. Examination Dates 4/20/2006 to 10/24/2007
9. Inspection Period Identification: 12/3/2004 to 3/31/2008
10. Inspection Interval Identification: 9/21/1997 to 3/31/2008
11. Applicable Edition of Section XI 1989 Addenda None
12. Date/Revision of Inspection Plan: 1/2-ADM-2039, Revision 7
13. Abstract of Examination and Tests. Include a list of examinations and tests and a statement concerning status of work required for the Inspection Plan. See Appendix I (Code Exams) for exams performed during 1R18. 1R18 was the second outage in the 3<sup>rd</sup> Period of the 3<sup>rd</sup> Ten-Year Interval. This was the last outage in this period and interval. The Reactor Vessel 10-yr ISI exam was completed during this outage. All examinations, requiring plant shutdown conditions have been completed for the current 10 year Interval. The remaining eight examinations will be performed during plant operation prior the the Interval end date of 3/31/08.
14. Abstract of Results of Examination and Tests. See text of summary report.
15. Abstract of Corrective Measures. No Corrective measures resulting from NDE ISI examinations were required in 1R18

We certify that a) the statements made in this report are correct, b) the examinations and tests meet the Inspection Plan as required by the ASME Code, Section XI, and c) corrective measures taken conform to the rules of the ASME Code, Section XI.

Certificate of Authorization No. (if applicable) N/A Expiration Date N/A  
 Date 1/9/08 Signed FirstEnergy Nuclear Operating Co. By [Signature]  
 (Owner)

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Pennsylvania and employed by HSB CT of Connecticut have inspected the components described in this Owner's Report during the period 4/20/2006 to 10/24/2007 and state that to the best of my knowledge and belief, the Owner has performed examinations and tests and taken corrective measures described in this Owner's Report in accordance with the Inspection Plan and as required by the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer make any warranty, expressed or implied, concerning the examinations, tests, and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature] Commissions NB 9428 ANIB, PA 2384  
 Inspector's Signature National Board, State, Province and Endorsements  
 Date 1-11-08

## **OUTAGE SUMMARY**

During the Eighteenth Refueling Outage (1R18) at the Beaver Valley Power Station, Unit 1, Inservice Inspection (ISI) examinations were performed on Class 1, 2, and 3 components. This was the second outage in the third period of the third ten year interval. The Class 1, 2 and 3 examinations were based on ASME Section XI, 1989 Edition.

### **ASME XI Class 1, 2, and 3 Credited Exams (See Appendix I)**

1. Seventy-eight (78) Class 1 exams were performed and are divided as follows:

- a. Welds (vessels, piping, and attachments)
  - Ultrasonic Exams - 40
  - Penetrant Exams - 3
  - Visual Exams - 8
- b. Class 1 bolting
  - Ultrasonic Exams - 4
- c. Visual Examinations (VT-3)
  - Pipe Supports - 12
  - Vessel Supports - 3
- d. RI-ISI piping VT-2 exams - 8

2. Fifty-five (55) Class 2 exams were performed and are divided as follows:

- a. Welds (vessels, pumps, piping, and attachments)
  - Ultrasonic Exams - 3
  - Penetrant Exams - 10
- b. Supports, visual exams - 14
- c. RI-ISI piping VT-2 exams - 28

3. Six (6) visual exams of Class 3 supports were performed:

- a. Supports, visual exams - 6

Examinations were performed by FirstEnergy Nuclear Operating Company (FENOC) NDE Technicians, supplemented with contracted NDE technicians from Integrated Technologies, Inc. (iTi). Appendix I compiles the examinations that have been credited toward fulfilling the Ten Year Plan requirements.

### **Reactor Vessel 10-Yr ISI**

The 10 year ISI automated examination of the BV1 Reactor Vessel was completed by WesDyne International during 1R18. FENOC personnel performed the manual UT examination of the threads in flange. The automated examinations of the reactor vessel yielded a total of 57 recordable indications. Flaw bounding measurements for these indications were performed by qualified examiners. All of the recorded indications were assessed against the criteria contained in ASME XI, IWB-3500 and were found to be within the allowable limits specified, with no further evaluation required.

Supplemental eddy current examinations of the dissimilar metal welds from the nozzle bore yielded no recordable indications. Remote visual examination of the nozzle inner radius areas (Enhanced VT) resulted in no recordable indications. Remote visual examinations of the reactor vessel interior and attachments (VT-1/VT-3) resulted in no recordable indications.

### **Pressure Testing**

The Class 1 end of interval pressure test was performed prior to plant start-up from 1R18. All Class 1 bolted connections were examined during 1R18. Also, Class 2 and 3 system functional and system inservice tests were performed in accordance with 40-month pressure testing requirements.

### **Deficiency Resolution**

There were no recorded ISI NDE deficiencies in 1R18.

### **Steam Generator Tube Examination**

One hundred percent of the in-service tubes were examined in the three generators. Results of the examinations are submitted to regulatory authorities per Technical Specification requirements.

### **NIS-2 Forms**

Included as Appendix II are the NIS-2 Forms associated with repairs and replacements. Code Case N-416-1 or N-416-2, Alternative Pressure Test Requirement for Welded Repairs or Installation of Replacement Items by Welding, Class 1, 2 and 3, was used. The NIS-2 specifies when the Case was implemented and which revision was used.

APPENDIX I  
1R18 Completed Code Exams

Summary No.	Component Identification	Description	Class	Item	Category	Method	Iso
033300	CH-96-9-F-13	SOCKET WELD	1	R1.12	R-A	VT-2,	0246A
036700	CH-97-7-S-07	SOCKET WELD	1	R1.12	R-A	VT-2,	0247A
040000	CH-98-9-S-06	SOCKET WELD	1	R1.12	R-A	VT-2,	0248A
068100	PS-244-VS-1	SNUBBER	1	F01.10N	F-A	VT-3,	0244A
078600	RC-71-9-S-06	BRANCH CONN. WELD	1	R1.12	R-A	VT-2,	0348B
085400	RC-72-4E-S-06	BRANCH CONN. WELD	1	R1.12	R-A	VT-2,	0348D
089100	RC-72-7-E-01	NOZZLE TO SAFE END	1	R1.11	R-A	UT ,	0348D
089200	RC-104-1-E-01	NOZZLE TO SAFE END	1	R1.11	R-A	UT ,	0350A
094200	RC-104-2-PSSP-122A	SNUBBER	1	F01.10N	F-A	VT-3,	0350A
094300	RC-104-2-PSSP-122B	SNUBBER	1	F01.10N	F-A	VT-3,	0350A
138500	RC-53-VS-358-1	SNUBBER	1	F01.10N	F-A	VT-3,	0358A
144900	DLW-LOOP2-8-HSS-103	SNUBBER	1	F01.10N	F-A	VT-3,	0999B
145000	DLW-LOOP2-8-HSS-104	SNUBBER	1	F01.10N	F-A	VT-3,	0999B
150900	INCORE INSTRUMENTS	RV HEAD PARTIAL PENETRATION WELDS	1	B04.012	B-E	VT-2,	E-001D
151000	INSTRUMENTATION NOZZLES	LOWER HEAD INSTR NOZZLES	1	B04.013	B-E	VT-2,	E-001D
151100	RC-R-1-C-1	SHELL TO FLANGE CIRC WELD	1	B01.030	B-A	UT ,	E-001A
151200	RC-R-1-C-2	CIRCUMFERENTIAL WELD	1	B01.011	B-A	UT ,	E-001A
151300	RC-R-1-C-5	CIRCUMFERENTIAL WELD	1	B01.011	B-A	UT ,	E-001A
151400	RC-R-1-C-8	CIRCUMFERENTIAL WELD	1	B01.011	B-A	UT ,	E-001A
151500	RC-R-1-C-9	LOWER HEAD CIRC WELD	1	B01.021	B-A	UT ,	E-001A
152200	RC-R-1-CRDM-SUPP-1	CRDM SHROUD HOUSING SUPPORT	1	F01.40E	F-A	VT-3,	E-001A
152210	RC-R-1-CRDM-SUPP-2	CRDM SHROUD HOUSING SUPPORT	1	F01.40E	F-A	VT-3,	E-001A
152220	RC-R-1-CRDM-SUPP-3	CRDM SHROUD HOUSING SUPPORT	1	F01.40E	F-A	VT-3,	E-001A
153600	RC-R-1-N-17	INLET NOZZLE WELD	1	B03.090	B-D	UT ,	E-001B
153700	RC-R-1-N-17IR	NOZZLE INSIDE RADIUS	1	B03.100	B-D	UT ,	E-001B
153800	RC-R-1-N-18	OUTLET NOZZLE WELD	1	B03.090	B-D	UT ,	E-001B
153900	RC-R-1-N-18IR	NOZZLE INSIDE RADIUS	1	B03.100	B-D	UT ,	E-001B
154000	RC-R-1-N-19	INLET NOZZLE WELD	1	B03.090	B-D	UT ,	E-001B
154100	RC-R-1-N-19IR	NOZZLE INSIDE RADIUS	1	B03.100	B-D	UT ,	E-001B
154200	RC-R-1-N-20	OUTLET NOZZLE WELD	1	B03.090	B-D	UT ,	E-001B
154300	RC-R-1-N-20IR	NOZZLE INSIDE RADIUS	1	B03.100	B-D	UT ,	E-001B
154400	RC-R-1-N-21	INLET NOZZLE WELD	1	B03.090	B-D	UT ,	E-001B
154500	RC-R-1-N-21IR	NOZZLE INSIDE RADIUS	1	B03.100	B-D	UT ,	E-001B
154600	RC-R-1-N-22	OUTLET NOZZLE WELD	1	B03.090	B-D	UT ,	E-001B
154700	RC-R-1-N-22IR	NOZZLE INSIDE RADIUS	1	B03.100	B-D	UT ,	E-001B
154800	RC-R-1-LIG-01 TO 19	THREADS IN FLG.	1	B06.040	B-G-1	UT ,	E-001B
156700	RC-R-1-LIG-20 TO 38	THREADS IN FLG.	1	B06.040	B-G-1	UT ,	E-001B
158600	RC-R-1-LIG-39 TO 58	THREADS IN FLG.	1	B06.040	B-G-1	UT ,	E-001B

APPENDIX I  
1R18 Completed Code Exams

Summary No.	Component Identification	Description	Class	Item	Category	Method	Iso
160600	RC-R-1-L-3	LONGITUDINAL WELD	1	B01.012	B-A	UT , , ,	E-001C
160700	RC-R-1-L-4	LONGITUDINAL WELD	1	B01.012	B-A	UT , , ,	E-001C
160800	RC-R-1-L-6	LONGITUDINAL WELD	1	B01.012	B-A	UT , , ,	E-001C
160900	RC-R-1-L-7	LONGITUDINAL WELD	1	B01.012	B-A	UT , , ,	E-001C
161000	RC-R-1-L-10	LOWER HEAD MERIDIONAL WELD	1	B01.022	B-A	UT , , ,	E-001D
161100	RC-R-1-L-11	LOWER HEAD MERIDIONAL WELD	1	B01.022	B-A	UT , , ,	E-001D
161200	RC-R-1-L-12	LOWER HEAD MERIDIONAL WELD	1	B01.022	B-A	UT , , ,	E-001D
161300	RC-R-1-L-13	LOWER HEAD MERIDIONAL WELD	1	B01.022	B-A	UT , , ,	E-001D
161400	RC-R-1-L-14	LOWER HEAD MERIDIONAL WELD	1	B01.022	B-A	UT , , ,	E-001D
161500	RC-R-1-L-15	LOWER HEAD MERIDIONAL WELD	1	B01.022	B-A	UT , , ,	E-001D
161600	RC-R-1-C-16	LH CIRCUMFERENTIAL WELD	1	B01.021	B-A	UT , , ,	E-001D
161700	RC-R-1-LOWER-INT	CORE SUPPORT STRUCTURE	1	B13.070	B-N-3	VT-3, , ,	E-001F
161800	RC-R-1-INT-ATT	BEYOND BELTLINE REGION	1	B13.060	B-N-2	VT-3, , ,	E-001F
162000	RC-R-1-ACC-INT	INTERIOR	1	B13.010	B-N-1	VT-3, , ,	E-001F
162100	RC-R-1-UPPER-INT	CORE SUPPORT STRUCTURE	1	B13.070	B-N-3	VT-3, , ,	E-001G
192000	RC-TK-1-L-3	LONGITUDINAL WELD	1	B02.012	B-B	UT , , ,	E-001P
192400	RC-TK-1-C-7	CIRCUMFERENTIAL WELD	1	B02.011	B-B	UT , , ,	E-001P
193100	RC-TK-1-RADIUS-6	NOZZLE INSIDE RADIUS	1	B03.120	B-D	VT-2, , ,	E-001P
194800	RC-TK-1-HTR PENTS	PARTIAL PENETRATION WELDS	1	B04.020	B-E	VT-2, , ,	E-001P
207500	RC-P-1A-A-1	WELDED SUPPORT	1	B10.030	B-K	PT , , ,	E-001T
207600	RC-P-1A-A-2	WELDED SUPPORT	1	B10.030	B-K	PT , , ,	E-001T
207700	RC-P-1A-A-3	WELDED SUPPORT	1	B10.030	B-K	PT , , ,	E-001T
221700	MOV-RC-595-B3-25 TO 48	BOLTING	1	B06.210	B-G-1	UT , , ,	E-002A
253100	DLW-LOOP1-1-F-01	SAFE END WELD	1	R1.11	R-A	UT , , ,	L-001A
256300	DLW-LOOP1-7-F-12	SAFE END WELD	1	R1.11	R-A	UT , , ,	L-001A
259000	DLW-LOOP2-1-F-13	SAFE END WELD	1	R1.11	R-A	UT , , ,	L-002A
261800	DLW-LOOP2-7-F-24	SAFE END WELD	1	R1.11	R-A	UT , , ,	L-002A
264900	DLW-LOOP3-1-F-25	SAFE END WELD	1	R1.11	R-A	UT , , ,	L-003A
267200	DLW-LOOP3-6-F-33	BUTT WELD	1	R1.11	R-A	UT , , ,	L-003A
267600	DLW-LOOP3-6-F-34	BUTT WELD	1	R1.11	R-A	UT , , ,	L-003A
267900	DLW-LOOP3-7-F-36	SAFE END WELD	1	R1.11	R-A	UT , , ,	L-003A
274200	RH-23-1-HSS-123	SNUBBER	1	F01.10N	F-A	VT-3, , ,	0107A
274300	RH-23-1-HSS-124	SNUBBER	1	F01.10N	F-A	VT-3, , ,	0107A
298000	SI-102-2A-F-1A	SOCKET WELD	1	R1.12	R-A	VT-2, , ,	0200A
300300	SI-106-1C-S-02	SOCKET WELD	1	R1.12	R-A	VT-2, , ,	0200B
319200	SI-74-4-HSS-420	SNUBBER	1	F01.10N	F-A	VT-3, , ,	0375C
319400	SI-74-4-HSS-421	SNUBBER	1	F01.10N	F-A	VT-3, , ,	0375C
321200	SI-74-5-HSS-422	SNUBBER	1	F01.10N	F-A	VT-3, , ,	0375C

APPENDIX I  
1R18 Completed Code Exams

Summary No.	Component Identification	Description	Class	Item	Category	Method	Iso
329700	SI-73-7-HSS-418	SNUBBER	1	F01.10N	F-A	VT-3,	0375F
332300	SI-104-1-F-02	SOCKET WELD	1	R1.12	R-A	VT-2,	0376A
371200	WFPD-23-3-HSS-208A	SNUBBER	2	F01.20N	F-A	VT-3,	0062B
371400	WFPD-23-3-HSS-207	SNUBBER	2	F01.20N	F-A	VT-3,	0062B
371500	WFPD-23-3-HSS-208	SNUBBER	2	F01.20N	F-A	VT-3,	0062B
381500	P11-G-PSSP-36A	SNUBBER	2	F01.20N	F-A	VT-3,	0115A
397700	SI-82-1-S-01	SOCKET WELD	2	R1.12	R-A	VT-2,	0192A
420100	CH-79-2B-S-07	SOCKET WELD	2	R1.12	R-A	VT-2,	0265A
420200	CH-79-2B-S-10	BRANCH CONN. WELD	2	R1.12	R-A	VT-2,	0265A
422600	CH-78-2B-S-10	BRANCH CONN. WELD	2	R1.12	R-A	VT-2,	0265A
422700	CH-78-2B-S-06	SOCKET WELD	2	R1.12	R-A	VT-2,	0265A
425000	CH-77-2B-S-10	BRANCH CONN. WELD	2	R1.12	R-A	VT-2,	0265A
425200	CH-77-2B-S-05	SOCKET WELD	2	R1.12	R-A	VT-2,	0265A
436000	CH-69-1-S-07	PIPE WELD	2	R1.12	R-A	VT-2,	0267A
440000	CH-70-1-F-1X-A	SOCKET WELD	2	R1.12	R-A	VT-2,	0267A
443800	CH-71-1-S-07	PIPE WELD	2	R1.12	R-A	VT-2,	0267A
470350	CH-131-1-F-4X	SOCKET WELD	2	R1.12	R-A	VT-2,	0268A
496600	SI-75-2-A-01	WELDED ATTACHMENT SUPPORT SH-230	2	C03.020	C-C	PT	0272A
509200	CH-124-10-F-09B	BRANCH CONN. WELD	2	R1.12	R-A	VT-2,	0273A
512700	SI-81-1A-A-01	WELDED ATTACHMENT SUPPORT R-70	2	C03.020	C-C	PT	0273B
512800	SI-81-R-70	SUPPORT	2	F01.20R	F-A	VT-3,	0273B
624100	SI-16-6-HSS-212A	SNUBBER	2	F01.20N	F-A	VT-3,	0109A
624200	SI-16-6-HSS-212B	SNUBBER	2	F01.20N	F-A	VT-3,	0109A
635300	SI-16-3-S-11	BRANCH CONN. WELD	2	R1.12	R-A	VT-2,	0115A
648620	SI-37-1-F-19	SOCKET WELD	2	R1.12	R-A	VT-2,	0360A
648630	SI-37-1-F-23	SOCKET WELD	2	R1.12	R-A	VT-2,	0360A
648650	SI-36-1-F-26	SOCKET WELD	2	R1.12	R-A	VT-2,	0360A
648660	SI-36-1-F-29	SOCKET WELD	2	R1.12	R-A	VT-2,	0360A
648680	SI-145-1-F-01	SOCKET WELD	2	R1.12	R-A	VT-2,	0360A
654800	SI-P-1B-1	PUMP CASING WELD	2	C06.010	C-G	PT	E-005C
654900	SI-P-1B-2	PUMP CASING WELD	2	C06.010	C-G	PT	E-005C
655000	SI-P-1B-3	PUMP CASING WELD	2	C06.010	C-G	PT	E-005C
655100	SI-P-1B-4	PUMP CASING WELD	2	C06.010	C-G	PT	E-005C
658900	SHP-56-3-HSS-202	SNUBBER	2	F01.20N	F-A	VT-3,	0001A
659100	SHP-56-3-HSS-203	SNUBBER	2	F01.20N	F-A	VT-3,	0001A
670700	SHP-58-7-L-05	LONGITUDINAL WELD ALONG ELBOW	2	R1.11	R-A	UT	0001C
670800	SHP-58-7-L-06	LONGITUDINAL WELD ALONG ELBOW	2	R1.11	R-A	UT	0001C
670900	SHP-58-7-F-09	PIPE WELD	2	R1.11	R-A	UT	0001C

APPENDIX I  
1R18 Completed Code Exams

Summary No.	Component Identification	Description	Class	Item	Category	Method	Iso
707500	RH-9-1-S-14	BRANCH CONN. WELD	2	R1.12	R-A	VT-2, , ,	0075A
709200	RH-12-2-S-09	BRANCH CONN. WELD	2	R1.12	R-A	VT-2, , ,	0075A
721000	RH-16-3-HSS-121	SNUBBER	2	F01.20N	F-A	VT-3, , ,	0208A
721100	RH-16-3-HSS-122	SNUBBER	2	F01.20N	F-A	VT-3, , ,	0208A
721710	RH-E-1A-N-5	RE-INF PLATE TO INLET NOZZLE	2	C02.031	C-B	PT , , ,	E-004A
721720	RH-E-1A-N-7	RE-INF PLATE TO VESSEL (INLET)	2	C02.031	C-B	PT , , ,	E-004A
721730	RH-E-1A-N-8	RE-INF PLATE TO VESSEL (OUTLET)	2	C02.031	C-B	PT , , ,	E-004A
721740	RH-E-1A-N-6	RE-INF PLATE TO OUTLET NOZZLE	2	C02.031	C-B	PT , , ,	E-004A
752700	RS-1-3C-HSS-201	SNUBBER	2	F01.20N	F-A	VT-3, , ,	0079A
753300	RS-1-3C-HSS-238	SNUBBER	2	F01.20N	F-A	VT-3, , ,	0079A
853100	CC-527-PSSP-300A	SNUBBER	3	F01.30N	F-A	VT-3, , ,	0285A
853200	CC-527-PSSP-300B	SNUBBER	3	F01.30N	F-A	VT-3, , ,	0285A
866200	FC-4-HSS-5A	SNUBBER	3	F01.30N	F-A	VT-3, , ,	0071A
870400	WR-19-HSS-300	SNUBBER	3	F01.30N	F-A	VT-3, , ,	0067A
875500	WR-9-HSS-313	SNUBBER	3	F01.30N	F-A	VT-3, , ,	0068A
903997	QS-4-10G-HSS-202	SNUBBER	2	F01.20N	F-A	VT-3, , ,	0111A
913870	CH-57-1-S-22	SOCKET WELD	2	R1.12	R-A	VT-2, , ,	0170B
913885	CH-123-1-F-01	SOCKET WELD	2	R1.12	R-A	VT-2, , ,	1042A
914850	CH-149-1-S-22	SOCKET WELD	2	R1.12	R-A	VT-2, , ,	1254A
916200	CH-149-1-S-17	SOCKET WELD	2	R1.12	R-A	VT-2, , ,	1254A
929500	CH-99-1-S-48	SOCKET WELD	2	R1.12	R-A	VT-2, , ,	1518A
929600	CH-100-1-S-42	SOCKET WELD	2	R1.12	R-A	VT-2, , ,	1538A
929700	CH-101-1-S-38	SOCKET WELD	2	R1.12	R-A	VT-2, , ,	1510A

**APPENDIX II**  
**REPAIR / REPLACEMENT ABSTRACT**  
**AND**  
**NIS-2 FORMS**

Form No. 1805

**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**  
**As Required by the Provisions of the ASME Code Section XI**

1. Owner F.E.N.O.C Date 11-13-2007  
(NAME)  
76 South Main Street – Akron, OH 44308 Sheet 1 of 4  
(ADDRESS)
2. Plant Beaver Valley Power Station (BVPS) Unit No. 1  
(NAME)  
Shippingport, PA 15077 Work Order #200209617, P.O. 55104586  
(ADDRESS) Repair/Replacement Organization P.O. No., Job No., etc.
3. Work Performed By BVPS Construction Service Type Code Symbol Stamp N/A  
(NAME)  
Shippingport, PA 15077 Authorization No. N/A  
(ADDRESS) Expiration Date "
4. Identification of System Main Steam (Class A)
5. (a) Applicable Construction Code Section III 1968 Edition, N/A Addenda, N/A Code Case  
 (b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 1989  
 (c) Applicable Section XI Code Case(s): N/A

## 6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Safety Valve	Dresser	BM-7756	N/A	SV-IMS-101A	1968	Removed	Yes
Safety Valve	Dresser Flow Control	BY-89642	N/A	SV-IMS-101A	2003	Installed	Yes
Disc	Dresser Flow Control	ADW93	N/A	N/A	2006	Installed	Yes

7. Description of Work Replaced valve and inlet studs & nuts. Prior to installation NWS Technologies replaced valve disc.

8. Tests Conducted: Hydrostatic\* ☐ Pneumatic\* ☐ Nominal Operating Pressure ☒ Exempt ☐  
 Other ☐ Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F

\*Record test pressure and temperature

## FORM NIS-2 (Back)

9. Remarks Code Data Reports attached. The disc on replacement valve S/N BY-89642 was  
Applicable Manufacturer's Data Reports to be attached  
replaced by NWS Technologies, LLC. Replaced 1-3/8" Studs: P.O. 47020638 / Ht. #K132, P.O.  
104336-160 / Ht. #13853-C625; Nuts: P.O. 45136785 / Ht. #P366, P.O. 45138286 / Ht. #P421.

## CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date N/A

Signed [Signature] Senior Specialist Date November 26, 20 07  
Owner or Owner's Designee, Title

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Pennsylvania and employed by HSB CT of Hartford, CT have inspected the components described in this Owner's Report during the period 4-19-06 to 10-24-07, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature] Commissions I, N, P 42384  
Inspector's Signature National Board, State, Province, and Endorsements

Date 11-29-, 20 07

**FORM NVR-1 REPORT OF REPAIR ☒ REPLACEMENT ☒  
OF NUCLEAR PRESSURE RELIEF DEVICES**

1. Work performed by: **NWS Technologies, LLC** Purchase Order # 55104586 Rev. 2  
131 Venture Boulevard, Spartanburg, SC 29306
2. Work performed for: First Energy Corporation, Beaver Valley Power Station
- 3/4. Owner - name, address and identification of nuclear power plant: Beaver Valley Power Station,  
P.O. Box 4, Shippingport, PA 15077
5. a: Repaired pressure relief device: Main Steam Safety Valve  
 b: Name of manufacturer: Consolidated / Dresser  
 c: Identifying nos.
- |  |                |            |                 |              |             |
|--|----------------|------------|-----------------|--------------|-------------|
| <u>3787A RT21</u>                        | <u>BY89642</u> | <u>n/a</u> | <u>steam</u>    | <u>6"</u>    | <u>2003</u> |
| (type)                                   | (mfr's S/N)    | (NB#)      | (service)       | (size)       | (yr. built) |
| d: Construction Code: <u>Section III</u> | <u>1968</u>    | <u>n/a</u> | <u>n/a</u>      | <u>A</u>     |             |
| (name/section/division)                  | (edition)      | (addenda)  | (Code Cases(s)) | (Code Class) |             |
6. ASME Code Section XI applicable for inservice inspection: 1989 n/a n/a  
 (edition) (addenda) (Code Case(s))
7. ASME Code Section XI used for repairs, replacements: 1989 n/a n/a  
 (edition) (addenda) (Code Case(s))
8. Construction Code used for repairs, replacements: 1968 n/a n/a  
 (edition) (addenda) (Code Case(s))
9. Design responsibilities: n/a
10. Opening pressure: 1075 psig  
 Set-pressure adjustment made at: NWS Technologies, LLC using steam
11. Description of work (include name and identifying number of replacement parts): Disassembled, inspected, lapped and lapped and passivated nozzle seat, replaced disc with pre-oxidized X750 disc, machined disc holder (CEAR 07-22), assembled. Certified set-pressure and seat tightness using steam.
12. Remarks: NWS Traveler #: 07-118. New disc s/n: ADW93

**CERTIFICATE OF COMPLIANCE**

I, Cesar V. Sierra certify that to the best of my knowledge and belief the statements made in this report are correct and the repair, modification or replacement of the pressure relief devices described above conforms to Section XI of the ASME Code and the National Board Inspection Code "VR" and "NR" rules.

National Board Certificate of Authorization No. 632 to use the "VR" stamp expires April 3, 2009.  
 National Board Certificate of Authorization No. 81 to use the "NR" stamp expires April 9, 2009.

7/23/07 NWS Technologies, LLC *[Signature]* Manager, QA  
 Date Repair Organization Authorized representative Title

**CERTIFICATE OF INSPECTION**

I, Charles F. Toegel Jr. holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and certificate of competency issued by the jurisdiction of North Carolina and employed by Hartford Steam Boiler of CT of Hartford, CT have inspected the repair, modification or replacement described in this report on 23 July 2007 and state that to the best of my knowledge and belief, this repair, modification or replacement has been completed in accordance with Section XI of the of the ASME Code and the National Board Inspection Code "VR" and "NR" rules.

By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied, concerning this repair, modification or replacement described in this report. Furthermore, neither the undersigned nor my employer shall be liable in any manner for any personal injury, property damage or loss of any kind arising from or connected with this inspection.

7/23/07 *[Signature]* NB # 8462, A, N, I NC# 1073  
 Date Inspector's Signature Commissions (NB (incl endorsements), jurisdiction, & no.)

**FORM N-2 CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL  
NUCLEAR PARTS AND APPURTENANCES\***  
As Required by the Provisions of the ASME Code, Section III  
Not to Exceed One Day's Production

Pg. 1 of 2

1 Manufactured and certified by Dresser Flow Control, Dresser Inc. La. Hwy 3225 @ US Hwy 187 N  
P. O. Box 1430 Alexandria, Louisiana 71309-1430  
(name and address of NPT Certificate Holder)

2 Manufactured for First Energy Nuclear Operating Co. Route 168 Shippingport, Pennsylvania 15077  
(name and address of purchaser)

3 Location of installation First Energy Nuclear Operating Co. Beaver Valley Power Station Shippingport, Pennsylvania 15077  
(name and address)

4 Type QS304 SB837 X-750 N/A N/A 2006  
(drawing no.) (material spec no.) (tensile strength) (CRN) (year built)

5 ASME Code Section III, Division 1: 1968 None A Vessels, Article 9 N/A  
(edition) (addenda date) (class) (Code Case no.)

6 Fabricated in accordance with Const. Spec. (Div 2 only) N/A Revision N/A Date N/A  
(no.)

7 Remarks: Serial Numbers Are Used In Lieu Of NPT Stamping.

8 Nom. thickness (in.) N/A Min. design thickness (in.) N/A Dia ID (ft. & in.) N/A Length overall (ft. & in.) N/A

9 When applicable, Certificate Holders' Data Reports are attached for each item of this report:

Part or Appurtenance Serial Number	National Board No. in Numerical Order	Part or Appurtenance Serial Number	National Board No. in Numerical Order
(1) ADW91 ✓		(26)	
(2) ADW82		(27)	
(3) ADW83 ✓		(28)	
(4) ADW94		(29)	
(5)		(30)	
(6)		(31)	
(7)		(32)	
(8)		(33)	
(9)		(34)	
(10)		(35)	
(11)		(36)	
(12)		(37)	
(13)		(38)	
(14)		(39)	
(15)		(40)	
(16)		(41)	
(17)		(42)	
(18)		(43)	
(19)		(44)	
(20)		(45)	
(21)		(46)	
(22)		(47)	
(23)		(48)	
(24)		(49)	
(25)		(50)	

10 Design pressure N/A psi Temp N/A °F Hydro. Test pressure 2350 PSIG at temp. °F

\* Supplemental information in the form of Exds, Sketches, or drawings may be used provided (1) size is 8-1/2 x 11, (2) information in Items 2 and 3 on this Data Report is included on each sheet (3) each sheet is numbered and the number of sheets is recorded at the top of this form

## FORM N-2 (Back—Pg. 2 of 2)

Certificate Holder's Serial Nos. ADW81, ADW82,  
ADW83, ADW84

## CERTIFICATION OF DESIGN

Design specifications certified by N/A P.E. State N/A Reg. No. N/A  
(when applicable)

Design report certified by N/A P.E. State N/A Reg. No. N/A  
(when applicable)

## CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this (these) DISC  
conforms to the rules of construction of the ASME Code, Section III, Division 1.

NPT Certificate of Authorization No. N-2434 Expires 5/20/2007

Date 3-13-06 Name SEE LINE 1 Signed [Signature]  
(NPT Certificate Holder) (Authorized Representative)

## CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province  
of LOUISIANA and employed by HSB CT  
of HARTFORD, CT have inspected these items described in this Data Report on 3/13/06 and state that to the  
best of my knowledge and belief, the Certificate Holder has fabricated these parts or appurtenances in accordance with the ASME Code, Section  
III, Division 1. Each part listed has been authorized for stamping on the date shown above.  
By signing this certificate, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the equipment described  
in this Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or  
loss of any kind arising from or connected with this inspection.

Date 3/13/06 Signed [Signature] Commissions L1000  
(Authorized Nuclear Inspector) (Natl Bd. and state or prov. and no. Y)

# FORM NV-1 CERTIFICATE HOLDERS' DATA REPORT FOR PRESSURE OR VACUUM RELIEF VALVES\*

As Required by the Provisions of the ASME Code, Section III, Division 1

Pg. 1 of 2

1. Manufactured and certified by	Dresser Flow Control, Dresser Inc. La. Hwy 3225 @ US Hwy 167 N P. O. Box 1430 Alexandria, Louisiana 71309-1430 <small>(name and address of NV Certificate Holder)</small>				
2. Manufactured for	First Energy Corporation P. O. Box 3611 Akron, Ohio 44309-3611 <small>(name and address of Purchaser)</small>				
3. Location of installation	First Energy Corporation Beaver Valley Power Station Unit # 2 Shippingport, Pennsylvania 15077 <small>(name and address)</small>				
4. Valve	3787A <small>(model no., series no.)</small>	Orifice size	14.18 sq in <small>(in.)</small>	Nom. Inlet size	6" Outlet size 10" <small>(in.)</small>
5. ASME Code, Section III, Division 1:	1968 <small>(edition)</small>	NO <small>(addenda date)</small>	A, ARTICLE 9(2) <small>(class)</small>		N/A <small>(Code Case no.)</small>
6. Type	Spring <small>(spring, pilot or power operated)</small>	1075 <small>(set pressure, psig)</small>	Fixed <small>(blowdown, psi)</small>	Sat <small>(rated temp.)</small>	2250 at SAT °F <small>(hydro. Test, psig, inlet)</small>
7. Identification	BY89642 <small>(Cert. Holder's serial no.)</small>	N/A <small>(CRN)</small>	3NC2022 <small>(drawing no.)</small>	N/A <small>(Natl. Bd. No.)</small>	2003 <small>(year built)</small>
8. Control ring settings	Fixed				
9. Pressure retaining items:					

	Serial No. or Identification	Mat'l. Spec., Including Type or Grade	Tensile Strength
Body	ADP38	ASME SA216 GR WCC	75 ksi
Bonnet or Yoke	ADN84	ASME SA216 GR WCC	70 ksi
Support Rods	AD022, AD023	ASME SA193 GR B6	
Nozzle	ADN93	ASME SA182 GR F316	
Disk	AD048	ASTM A565 GR 616	75 ksi
Spring Washers			
Adjusting Screws			
Spindles			
Spring			
Bolting			
Other Items	YOKE ROD NUT HT # RH99	ASME SA194 GR 2H	75 ksi
Flanges			
10. Relieving capacity	774,229 Lb/Hr Steam @ 107 <small>(steam or fluid, lb/hr) (psi)</small>	overpressure as certified by the National Board	4-5-56 <small>(date)</small>
11. Remarks:			

CERTIFICATION OF DESIGN			
Design Specification certified by	Louis P. Copian	P.E. State	California
Design Report certified by	D. K. Sharma	P.E. State	Louisiana
		Reg. no.	16001
		Reg. no.	20244
CERTIFICATE OF COMPLIANCE			
We certify that the statements made in this report are correct and that this valve conforms to the rules for construction of the ASME Code, Section III, Division 1...			
NV Certificate of Authorization No.	1747	Expires	5/20/2004
Date	5/14/04	Name	SEE LINE 1
		Signed	<i>[Signature]</i>
			<small>(Authorized Representative)</small>

FORM NV-1 (BACK--- Pg. 2 of 2 )

Certificate Holder's Serial No. BY89642

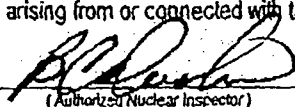
## CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Pressure Vessel Inspectors and the State or Province of LOUISIANA and employed by HSB CT of HARTFORD, CT. have inspected the valve described in this Data Report on 5/17/04 and state that to the best of my knowledge and belief, the Certificate Holder has constructed this valve in accordance with the ASME Code, Section III, Division 1. By signing this certificate, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the component described in this Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date

5/17/04

Signed

  
(Authorized Nuclear Inspector)

Commissions

NBTTM 'A' 'W'Label

(Nat'l Bd. (incl. Endorsements) and state or prov. And no.)

Form No. 1806

**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**  
**As Required by the Provisions of the ASME Code Section XI**

1. Owner F.E.N.O.C Date 11-13-2007  
(NAME)  
76 South Main Street – Akron, OH 44308 Sheet 1 of 4  
(ADDRESS)
2. Plant Beaver Valley Power Station (BVPS) Unit No. 1  
(NAME)  
Shippingport, PA 15077 Work Order #200209618, P.O. 55104586  
(ADDRESS) Repair/Replacement Organization P.O. No., Job No., etc.
3. Work Performed By BVPS Construction Service Type Code Symbol Stamp N/A  
(NAME)  
Shippingport, PA 15077 Authorization No. N/A  
(ADDRESS) Expiration Date "
4. Identification of System Main Steam (Class A)
5. (a) Applicable Construction Code Section III 1968 Edition, N/A Addenda, N/A Code Case  
 (b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 1989  
 (c) Applicable Section XI Code Case(s): N/A

## 6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Safety Valve	Dresser	BM-07759	N/A	SV-1MS-102A	1968	Removed	Yes
Safety Valve	Dresser Flow Control	BY-89643	N/A	SV-1MS-102A	2003	Installed	Yes
Disc	Dresser Flow Control	ADZ44	N/A	N/A	2007	Installed	Yes

7. Description of Work Replaced valve and inlet studs & nuts. Prior to installation NWS Technologies replaced valve disc.

8. Tests Conducted: Hydrostatic\* ☐ Pneumatic\* ☐ Nominal Operating Pressure ☒ Exempt ☐  
 Other ☐ Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F

\*Record test pressure and temperature

## FORM NIS-2 (Back)

9. Remarks Code Data Reports attached. The disc on replacement valve S/N BY-89643 was  
Applicable Manufacturer's Data Reports to be attached  
replaced by NWS Technologies, LLC. Replaced 1-3/8" Studs: P.O. 47020638 / Ht. #K132, P.O.  
47062335 / Ht. #S339; Nuts: P.O. 45138286 / Ht. #P421.

## CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date N/A

Signed [Signature] Senior Specialist Date November 26, 20 07  
Owner or Owner's Designee, Title

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Pennsylvania and employed by HSB CT of Hartford, CT have inspected the components described in this Owner's Report during the period 4-19-06 to 10-24-07, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature] Commissions I, S, PA 2384  
Inspector's Signature National Board, State, Province, and Endorsements

Date 11-29-, 20 07

**FORM NVR-1 REPORT OF REPAIR ☒ REPLACEMENT ☒  
OF NUCLEAR PRESSURE RELIEF DEVICES**

1. Work performed by: NWS Technologies, LLC Purchase Order # 55104586 Rev. 2  
131 Venture Boulevard, Spartanburg, SC 29306
2. Work performed for: First Energy Corporation, Beaver Valley Power Station
- 3/4. Owner - name, address and identification of nuclear power plant: Beaver Valley Power Station,  
P.O. Box 4, Shippingport, PA 15077
5. a: Repaired pressure relief device: Main Steam Safety Valve  
b: Name of manufacturer: Consolidated / Dresser  
c: Identifying nos.
- |                       |                            |                      |                          |                       |                            |
|-----------------------|----------------------------|----------------------|--------------------------|-----------------------|----------------------------|
| <u>3707RA RT21</u>    | <u>BY89643</u>             | <u>n/a</u>           | <u>steam</u>             | <u>6"</u>             | <u>2003</u>                |
| <small>(type)</small> | <small>(mfr's S/N)</small> | <small>(NB#)</small> | <small>(service)</small> | <small>(size)</small> | <small>(yr. built)</small> |
- d: Construction Code: Section III 1968 n/a n/a A  
(name/section/division) (edition) (addenda) (Code Cases(s)) (Code Class)
6. ASME Code Section XI applicable for inservice inspection: 1989 n/a n/a  
(edition) (addenda) (Code Case(s))
7. ASME Code Section XI used for repairs, replacements: 1989 n/a n/a  
(edition) (addenda) (Code Case(s))
8. Construction Code used for repairs, replacements: 1968 n/a n/a  
(edition) (addenda) (Code Case(s))
9. Design responsibilities: n/a
10. Opening pressure: 1085 psig  
Set-pressure adjustment made at: NWS Technologies, LLC using steam
11. Description of work (include name and identifying number of replacement parts): Disassembled, inspected, lapped and  
lapped and passivated nozzle seat, replaced disc with pre-oxidized X750 disc, replaced disc holder  
(CEAR 07-23), assembled. Certified set-pressure and seat tightness using steam.
12. Remarks: NWS Traveler #: 07-119. New disc s/n: ADZ44

**CERTIFICATE OF COMPLIANCE**

I, Cesar V. Sierra certify that to the best of my knowledge and belief the statements made in this report are correct and the repair, modification or replacement of the pressure relief devices described above conforms to Section XI of the ASME Code and the National Board Inspection Code "VR" and "NR" rules.

National Board Certificate of Authorization No. 632 to use the "VR" stamp expires April 3, 2009.  
National Board Certificate of Authorization No. 81 to use the "NR" stamp expires April 9, 2009.

7/23/07 NWS Technologies, LLC *Cesar V. Sierra* Manager, QA  
Date Repair Organization Authorized representative Title

**CERTIFICATE OF INSPECTION**

I, Charles F. Toegel Jr. holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and certificate of competency issued by the jurisdiction of North Carolina and employed by Hartford Steam Boiler of CT of Hartford, CT have inspected the repair, modification or replacement described in this report on 23 July 2007 and state that to the best of my knowledge and belief, this repair, modification or replacement has been completed in accordance with Section XI of the of the ASME Code and the National Board Inspection Code "VR" and "NR" rules.

By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied, concerning this repair, modification or replacement described in this report. Furthermore, neither the undersigned nor my employer shall be liable in any manner for any personal injury, property damage or loss of any kind arising from or connected with this inspection.

7/23/07 *Charles F. Toegel Jr.* NB # 8462, A, N, I NC# 1073  
Date Inspector's Signature Commissions (NB (Incl endorsements), jurisdiction, & no.)

**FORM N-2 CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL  
NUCLEAR PARTS AND APPURTENANCES\***  
As Required by the Provisions of the ASME Code, Section III  
Not to Exceed One Day's Production

Pg. 1 of 2

1. Manufactured and certified by Dresser Flow Control, Dresser Inc. La. Hwy 3225 @ US Hwy 167 N  
P. O. Box 1430 Alexandria, Louisiana 71309-1430  
(name and address of NPT Certificate Holder)

2. Manufactured for First Energy Nuclear Operating Co. Route 169 Shippingport, Pennsylvania 15077  
(name and address of purchaser)

3. Location of installation First Energy Nuclear Operating Co. Beaver Valley Power Station Shippingport, Pennsylvania 15077  
(name and address)

4. Type OS304 ASME SB837 170 KSI N/A 2007  
(drawing no.) (mat'l spec. no.) (tensile strength) (CRN) (year built)

5. ASME Code Section III, Division 1: 1968 None A Vessels, Article 9 N/A  
(edition) (addenda date) (class) (Code Case no.)

6. Fabricated in accordance with Const. Spec. (Div. 2 only) N/A Revision N/A Date N/A  
(no)

7. Remarks: Serial Numbers Are Used In Lieu Of NPT Stamping.

8. Nom. thickness (in.) N/A Min. design thickness (in.) N/A Dia. ID (ft. & in.) N/A Length overall (ft. & in.) N/A

9. When applicable, Certificate Holders' Data Reports are attached for each item of this report:

Part or Appurtenance Serial Number	National Board No. in Numerical Order	Part or Appurtenance Serial Number	National Board No. in Numerical Order
(1) <u>ADZ44</u> ✓		(26)	
(2) <u>ADZ45</u> /		(27)	
(3) <u>ADZ46</u> /		(28)	
(4) <u>ADZ47</u> /		(29)	
(5)		(30)	
(6)		(31)	
(7)		(32)	
(8)		(33)	
(9)		(34)	
(10)		(35)	
(11)		(36)	
(12)		(37)	
(13)		(38)	
(14)		(39)	
(15)		(40)	
(16)		(41)	
(17)		(42)	
(18)		(43)	
(19)		(44)	
(20)		(45)	
(21)		(46)	
(22)		(47)	
(23)		(48)	
(24)		(49)	
(25)		(50)	

10. Design pressure N/A psi Temp. N/A °F Hydro. Test pressure 2300 PSIG at temp. °F

\* Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8-1/2 x 11, (2) information in Items 2 and 3 on this Data Report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

## FORM N-2 (Back — Pg. 2 of 2)

Certificate Holder's Serial Nos. ADZ44 - ADZ47

## CERTIFICATION OF DESIGN

Design specifications certified by N/A P.E. State N/A Reg. No. N/A  
 (when applicable)

Design report\* certified by N/A P.E. State N/A Reg. No. N/A  
 (when applicable)

## CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this ( these ) DISC  
 conforms to the rules of construction of the ASME Code, Section III, Division 1.

NPT Certificate of Authorization No. N-2434 Expires 5/20/2007

Date 2/28/07 Name SEE LINE 1 Signed [Signature]  
 (NPT Certificate Holder) (authorized representative)

## CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province  
 of LOUISIANA and employed by HSB CT  
HARTFORD, CT. have inspected these items described in this Data Report on 2/28/07 and state that to the  
 best of my knowledge and belief, the Certificate Holder has fabricated these parts or appurtenances in accordance with the ASME Code, Section  
 III, Division 1. Each part listed has been authorized for stamping on the date shown above.  
 By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the equipment described  
 in this Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or  
 loss of any kind arising from or connected with this inspection.

Date 2/28/07 Signed [Signature] Commissions [Signature]  
 (Authorized Nuclear Inspector) (Nat'l Bd. (incl. endorsements) and state or prov. and no.)

JUN. 30. 2004 9:06AM

DRESSER-INDUSTRIES

NO. 9967 P. 2

**"CORRECTED CODE DATA REPORT"****FORM NV-1 CERTIFICATE HOLDERS' DATA REPORT FOR PRESSURE OR VACUUM  
RELIEF VALVES**

As Required by the Provisions of the ASME Code, Section III, Division 1

Pg. 1 of 2

1. Manufactured and certified by		Dresser Flow Control, Dresser Inc. 1 A Hwy 3225 @ US Hwy 167 N P. O. Box 1430 Alexandria, Louisiana 71309-1430 <small>(name and address of NV Certificate Holder)</small>					
2. Manufactured for		First Energy Corporation P. O. Box 3611 Akron, Ohio 44308-3611 <small>(name and address of Purchaser)</small>					
3. Location of installation		First Energy Corporation Beaver Valley Power Station Unit #2 Shippingport, Pennsylvania 15077 <small>(name and address)</small>					
4. Valve	3707RA <small>(model no., series no.)</small>	Orifice size	16.00 Sq In <small>(in.)</small>	Nom. Inlet size	6" <small>(in.)</small>	Outlet size	10" <small>(in.)</small>
5. ASME Code, Section III, Division 1:	1968 <small>(edition)</small>	NO <small>(addenda date)</small>	A, Article 9(2) <small>(class)</small>	N/A <small>(Code Case no.)</small>			
6. Type	Spring <small>(spring, pilot or power operated)</small>	1085 <small>(set pressure, psig)</small>	33-98 <small>(blowdown, psi)</small>	Sat <small>(rated temp.)</small>	2250 <small>(hydro. Test, psig, inlet)</small>	at	70 °F <small>(year built)</small>
7. Identification	BY-B9843 <small>(Cert. Holder's serial no.)</small>	N/A <small>(CRN)</small>	3NC2022 <small>(drawing no.)</small>	N/A <small>(Mater. Bd. No.)</small>	2003 <small>(year built)</small>		
8. Control ring settings		Lower - 8 Notches, Upper + 160 Notches					

## 9. Pressure retaining items:

	Serial No. or Identification	Matl. Spec., Including Type or Grade	Tensile Strength
Body	ADP37	ASME SA216 GR WCC	70 ksi
Bonnet or Yoke	ADN83	ASME SA216 GR WCC	70 ksi
Support Rods	ADO24 & ADO25	ASME SA193 GR B6	110 ksi
Nozzle	ADN92	ASME SA182 GR F316	75 ksi
Disk	ADO38	ASTM A565 GR 816	N/A
Spring Washers			
Adjusting Screws			
Spindle			
Spring			
Bolting			
Other Items	Yoke Rod Nut HT #RH99	ASME SA194 GR 2H	N/A
Flanges			

10. Relieving capacity	873,601 Lb/Hr Steam @ 97 <small>(steam or fluid, lb/hr)</small>	overpressure as certified by the National Board	10-13-1987 <small>(date)</small>
------------------------	--	---	-------------------------------------

11. Remarks:

**CERTIFICATION OF DESIGN**

Design Specification certified by	Louis P. Copian	P.E. State	California	Reg. no.	16001
Design Report certified by	D. K. Sharma	P.E. State	Louisiana	Reg. no.	20244

**CERTIFICATE OF COMPLIANCE**

We certify that the statements made in this report are correct and that this valve conforms to the rules for construction of the ASME Code, Section III, Division 1.

NV Certificate of Authorization No. 1747 Expires 5/20/2004

Date 6/29/04 Name SEE LINE 1 Signed *[Signature]*  
(NV Certificate Holder) (authorized representative)

FORM NV-1 (BACK--Pg. 2 of 2)

Certificate Holder's Serial No. By-88643

## CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Pressure Vessel Inspectors and the State or Province of LOUISIANA and employed by HSB CT of HARTFORD, CT. have inspected the valve described in this Data Report on 6/30/04, and state that to the best of my knowledge and belief, the Certificate Holder has constructed this valve in accordance with the ASME Code, Section III, Division 1. By signing this certificate, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the component described in this Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date

6/30/04

Signed

[Signature]

(Authorized Nuclear Inspector)

Commissions

1457779 'A' 'N' 'LABBY  
(Natl. Bd. (incl. Endorsements) and state or prov. And no.)

Form No. 1807

**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**  
**As Required by the Provisions of the ASME Code Section XI**

1. Owner F.E.N.O.C Date 11-13-2007  
(NAME)  
76 South Main Street – Akron, OH 44308 Sheet 1 of 4  
(ADDRESS)
2. Plant Beaver Valley Power Station (BVPS) Unit No. 1  
(NAME)  
Shippingport, PA 15077 Work Order #200209619, P.O. 55104586  
(ADDRESS) Repair/Replacement Organization P.O. No., Job No., etc.
3. Work Performed By BVPS Construction Service Type Code Symbol Stamp N/A  
(NAME)  
Shippingport, PA 15077 Authorization No. N/A  
(ADDRESS) Expiration Date "
4. Identification of System Main Steam (Class A)
5. (a) Applicable Construction Code Section III 1968 Edition, N/A Addenda, N/A Code Case  
 (b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 1989  
 (c) Applicable Section XI Code Case(s): N/A

## 6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Safety Valve	Dresser	BM-07762	N/A	SV-1MS-103A	1968	Removed	Yes
Safety Valve	Dresser Flow Control	BY-89644	N/A	SV-1MS-103A	2003	Installed	Yes
Disc	Dresser Flow Control	ADZ47	N/A	N/A	2007	Installed	Yes

7. Description of Work Replaced valve and inlet studs & nuts. Prior to installation NWS Technologies replaced valve disc.

8. Tests Conducted: Hydrostatic\* ☐ Pneumatic\* ☐ Nominal Operating Pressure ☒ Exempt ☐  
 Other ☐ Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F

\*Record test pressure and temperature

## FORM NIS-2 (Back)

9. Remarks Code Data Reports attached. The disc on replacement valve S/N BY-89644 was  
Applicable Manufacturer's Data Reports to be attached  
replaced by NWS Technologies, LLC. Replaced 1-3/8" Studs: P.O. 47062488 / Ht. #K369;  
Nuts: P.O. 45138286 / Ht. #P421.

## CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date N/A

Signed [Signature] Senior Specialist Date November 26, 20 07  
Owner or Owner's Designee, Title

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Pennsylvania and employed by HSB CT of Hartford, CT have inspected the components described in this Owner's Report during the period 4-19-06 to 10-24-07, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature] Commissions I, N, PA 2384  
Inspector's Signature National Board, State, Province, and Endorsements

Date 11-29-, 20 07

**FORM NVR-1 REPORT OF REPAIR ☒ REPLACEMENT ☒**  
**OF NUCLEAR PRESSURE RELIEF DEVICES**

1. Work performed by: NWS Technologies, LLC Purchase Order # 55104586 Rev. 2  
131 Venture Boulevard, Spartanburg, SC 29306
2. Work performed for: First Energy Corporation, Beaver Valley Power Station
- 3/4. Owner - name, address and identification of nuclear power plant: Beaver Valley Power Station,  
P.O. Box 4, Shippingport, PA 15077
5. a. Repaired pressure relief device: Main Steam Safety Valve  
b. Name of manufacturer: Consolidated / Dresser  
c. Identifying nos.
- |  | <u>3707RA RT21</u>      | <u>BY89644</u> | <u>n/a</u> | <u>steam</u>    | <u>6"</u>    | <u>2003</u> |
|--|-------------------------|----------------|------------|-----------------|--------------|-------------|
|  | (type)                  | (mfr's S/N)    | (NB#)      | (service)       | (size)       | (yr. built) |
| d. Construction Code:  | <u>Section III</u>      | <u>1968</u>    | <u>n/a</u> | <u>n/a</u>      | <u>A</u>     |             |
|  | (name/section/division) | (edition)      | (addenda)  | (Code Cases(s)) | (Code Class) |             |
| 6. ASME Code Section XI applicable for inservice inspection:   |                         | <u>1989</u>    | <u>n/a</u> | <u>n/a</u>      |              |             |
|  |                         | (edition)      | (addenda)  | (Code Case(s))  |              |             |
| 7. ASME Code Section XI used for repairs, replacements:  |                         | <u>1989</u>    | <u>n/a</u> | <u>n/a</u>      |              |             |
|  |                         | (edition)      | (addenda)  | (Code Case(s))  |              |             |
| 8. Construction Code used for repairs, replacements:   |                         | <u>1968</u>    | <u>n/a</u> | <u>n/a</u>      |              |             |
|  |                         | (edition)      | (addenda)  | (Code Case(s))  |              |             |
| 9. Design responsibilities:  | <u>n/a</u>              |                |            |                 |              |             |
| 10. Opening pressure: <u>1095 psig</u><br>Set-pressure adjustment made at: <u>NWS Technologies, LLC</u> using <u>steam</u>   |                         |                |            |                 |              |             |
| 11. Description of work (include name and identifying number of replacement parts): <u>Disassembled, inspected, lapped and lapped and passivated nozzle seat, replaced disc with pre-oxidized X750 disc, assembled.</u><br><u>Certified set-pressure and seat tightness using steam.</u> |                         |                |            |                 |              |             |
| 12. Remarks: <u>NWS Traveler #: 07-120. New disc s/n: ADZ47</u>  |                         |                |            |                 |              |             |

**CERTIFICATE OF COMPLIANCE**

I, Cesar V. Sierra certify that to the best of my knowledge and belief the statements made in this report are correct and the repair, modification or replacement of the pressure relief devices described above conforms to Section XI of the ASME Code and the National Board Inspection Code "VR" and "NR" rules.

National Board Certificate of Authorization No. 632 to use the "VR" stamp expires April 3, 2009.

National Board Certificate of Authorization No. 81 to use the "NR" stamp expires April 9, 2009.

7/23/07 NWS Technologies, LLC *Cesar V. Sierra* Manager, QA  
Date Repair Organization Authorized representative Title

**CERTIFICATE OF INSPECTION**

I, Charles F. Toegel Jr. holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and certificate of competency issued by the jurisdiction of North Carolina and employed by Hartford Steam Boiler of CT of Hartford, CT have inspected the repair, modification or replacement described in this report on 23 July 2007 and state that to the best of my knowledge and belief, this repair, modification or replacement has been completed in accordance with Section XI of the of the ASME Code and the National Board Inspection Code "VR" and "NR" rules.

By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied, concerning this repair, modification or replacement described in this report. Furthermore, neither the undersigned nor my employer shall be liable in any manner for any personal injury, property damage or loss of any kind arising from or connected with this inspection.

7/23/07 *Charles F. Toegel Jr.* NB # 8462, A, N, I NC# 1073  
Date Inspector's Signature Commissions (NB (incl endorsements), jurisdiction, & no.)

**FORM N-2 CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL  
NUCLEAR PARTS AND APPURTENANCES\***  
As Required by the Provisions of the ASME Code, Section III  
Not to Exceed One Day's Production

Pg. 1 of 2

1. Manufactured and certified by Dresser Flow Control, Dresser Inc. La. Hwy 3225 @ US Hwy 167 N  
P. O. Box 1430 Alexandria, Louisiana 71309-1430  
(name and address of NPT Certificate Holder)

2. Manufactured for First Energy Nuclear Operating Co. Route 169 Shippingport, Pennsylvania 15077  
(name and address of purchaser)

3. Location of installation First Energy Nuclear Operating Co. Beaver Valley Power Station Shippingport, Pennsylvania 15077  
(name and address)

4. Type OS304 ASME SB837 170 KSI N/A 2007  
(drawing no.) (mat'l spec. no.) (tensile strength) (CRN) (year built)

5. ASME Code Section III, Division 1: 1968 None A Vessels, Article 9 N/A  
(edition) (addenda date) (class) (Code Case no.)

6. Fabricated in accordance with Const. Spec. (Div. 2 only) N/A Revision N/A Date N/A  
(no)

7. Remarks : Serial Numbers Are Used In Lieu Of NPT Stamping.

8. Nom. thickness (in.) N/A Min. design thickness (in.) N/A Dia. ID (ft. & in.) N/A Length overall (ft. & in.) N/A

9. When applicable, Certificate Holders' Data Reports are attached for each item of this report:

Part or Appurtenance Serial Number	National Board No. in Numerical Order	Part or Appurtenance Serial Number	National Board No. in Numerical Order
(1) ADZ44 ✓		(26)	
(2) ADZ45 /		(27)	
(3) ADZ46 /		(28)	
(4) ADZ47 /		(29)	
(5)		(30)	
(6)		(31)	
(7)		(32)	
(8)		(33)	
(9)		(34)	
(10)		(35)	
(11)		(36)	
(12)		(37)	
(13)		(38)	
(14)		(39)	
(15)		(40)	
(16)		(41)	
(17)		(42)	
(18)		(43)	
(19)		(44)	
(20)		(45)	
(21)		(46)	
(22)		(47)	
(23)		(48)	
(24)		(49)	
(25)		(50)	

10. Design pressure N/A psi Temp. N/A °F Hydro. Test pressure 2300 PSIG at temp. °F

\* Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8-1/2 x 11, (2) information in Items 2 and 3 on this Data Report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

## FORM N-2 (Back — Pg. 2 of 2)

Certificate Holder's Serial Nos. ADZ44 - ADZ47

## CERTIFICATION OF DESIGN

Design specifications certified by N/A P.E. State N/A Reg. No. N/A  
 (when applicable)

Design report\* certified by N/A P.E. State N/A Reg. No. N/A  
 (when applicable)

## CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this ( these ) DISC  
 conforms to the rules of construction of the ASME Code, Section III, Division 1.

NPT Certificate of Authorization No. N-2434 Expires 5/20/2007

Date 2/28/07 Name SEE LINE 1 Signed Hansel Lee  
 (NPT Certificate Holder) (authorized representative)

## CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province  
 of LOUISIANA and employed by HSB CT  
 of HARTFORD, CT have inspected these items described in this Data Report on 2/28/07 and state that to the  
 best of my knowledge and belief, the Certificate Holder has fabricated these parts or appurtenances in accordance with the ASME Code, Section  
 III, Division 1. Each part listed has been authorized for stamping on the date shown above.  
 By signing this certificate, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the equipment described  
 in this Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or  
 loss of any kind arising from or connected with this inspection.

Date 2/28/07 Signed [Signature] Commissions NAACP  
 (Authorized Nuclear Inspector) (Natl. Bd. (incl. endorsements) and state or prov. and no.)

# FORM NV-1 CERTIFICATE HOLDERS' DATA REPORT FOR PRESSURE OR VACUUM RELIEF VALVES\*

As Required by the Provisions of the ASME Code, Section III, Division 1

Pg. 1 of 2

1. Manufactured and certified by	Dresser Flow Control, Dresser Inc. La. Hwy 3225 @ US Hwy 167 N P. O. Box 1430 Alexandria, Louisiana 71309-1430 (name and address of NV Certificate Holder)				
2. Manufactured for	First Energy Corporation P. O. Box 3611 Akron, Ohio 44309-3611 (name and address of Purchaser)				
3. Location of installation	First Energy Corporation Beaver Valley Power Station Unit # 2 Shippingport, Pennsylvania 15077 (name and address)				
4. Valve	3707RA (model no./series no.)	Orifice size	16.00 Sq In (in.)	Nom. Inlet size	6" Outlet size 10" (in.)
5. ASME Code, Section III, Division 1:	1968 (edition)	NO (addenda date)	A, Article 9 (2) (class)	N/A (Code Case no.)	
6. Type	Spring (spring, pilot or power operated)	1095 (set pressure, psig)	33 - 99 (blowdown, psi)	Sat. (rated temp.)	2250 at 70 °F (hydro. Test, psig, Inlet)
7. Identification	BY-89544 (Cert. Holder's serial no.)	N/A (CRN)	3NC2022 (drawing no.)	N/A (Nat'l Bd. No.)	2003 (year built)
8. Controlling settings	Lower - 8 Notches, Upper + 160 Notches				
9. Pressure retaining items:					

	Serial No. or Identification	Mat'l. Spec., Including Type or Grade	Tensile Strength
Body	ADP35	ASME SA216 GR WCC	70 ksi
Bonnet or Yoke	ADN82	ASME SA216 GR WCC	70 ksi
Support Rods	ADO26 & ADO51	ASME SA193 GR B6	110 ksi
Nozzle	ADN90	ASME SA182 GR F316	75 ksi
Disk	ADO21	ASTM A565 GR 616	N/A
Spring Washers			
Adjusting Screws			
Spindle			
Spring			
Bolting			
Other Items	Yoke Rod Nut HT #RH99	ASME SA194 GR 2H	N/A
Flanges			
10. Relieving capacity	873,601 Lb/Hr Steam @ 87 (steam or fluid, lb/hr) (psi)	overpressure as certified by the National Board	10-13-1967 (date)
11. Remarks:			

CERTIFICATION OF DESIGN			
Design Specification certified by	Louis P. Coplan	P.E. State	California
Design Report certified by	D. K. Sharma	P.E. State	Louisiana
		Reg. no.	16001
		Reg. no.	20244
CERTIFICATE OF COMPLIANCE			
We certify that the statements made in this report are correct and that this valve conforms to the rules for construction of the ASME Code, Section III, Division 1.			
NV Certificate of Authorization No.	1747	Expires	5/20/2004
Date	5/14/04	Name	SEE LINE 1
		Signed	<i>[Signature]</i>
			(authorized representative)

JUN. 23. 2004 11:33AM

DSSESSER-VALVE

NO. 6436 P. 10

FORM NV-1 (BACK--- Pg. 2 of 2 )

Certificate Holder's Serial No. By-89644

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Pressure Vessel Inspectors and the State or Province of LOUISIANA and employed by HSB CT of HARTFORD, CT. have inspected the valve described in this Data Report on 5/17/04, and state that to the best of my knowledge and belief, the Certificate Holder has constructed this valve in accordance with the ASME Code, Section III, Division 1. By signing this certificate, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the component described in this Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date

5/17/04

Signed

[Signature]  
(Authorized Nuclear Inspector)

Commissions

NOTA 'A' 'U'

(Natl. Bd. (incl. Endorsements) and state or prov. And no.)

LAGG

Form No. 1808

**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**  
**As Required by the Provisions of the ASME Code Section XI**

1. Owner F.E.N.O.C Date 11-07-2007  
(NAME)

76 South Main Street – Akron, OH 44308 Sheet 1 of 4  
(ADDRESS)

2. Plant Beaver Valley Power Station (BVPS) Unit No. 1  
(NAME)

Shippingport, PA 15077 Work Order #200209847, P.O. 55104586  
(ADDRESS) Repair/Replacement Organization P.O. No., Job No., etc.

3. Work Performed By BVPS Construction Service Type Code Symbol Stamp N/A  
(NAME)

Shippingport, PA 15077 Authorization No. N/A  
(ADDRESS)

Expiration Date "

4. Identification of System Main Steam (Class A)

5. (a) Applicable Construction Code Section III 1968 Edition, N/A Addenda, N/A Code Case  
 (b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 1989  
 (c) Applicable Section XI Code Case(s): N/A

6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Safety Valve	Dresser	BM-7765	N/A	SV-IMS-104A	1968	Removed	Yes
Safety Valve	Dresser Flow Control	BY-89645	N/A	SV-IMS-104A	2003	Installed	Yes
Disc	Dresser Flow Control	ADZ45	N/A	N/A	2007	Installed	Yes

7. Description of Work Replaced valve and inlet studs & nuts.

8. Tests Conducted: Hydrostatic\* ☐ Pneumatic\* ☐ Nominal Operating Pressure ☒ Exempt ☐  
 Other ☐ Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F

\*Record test pressure and temperature

## FORM NIS-2 (Back)

9. Remarks Code Data Reports attached. The disc on replacement valve S/N BY-89645 was  
Applicable Manufacturer's Data Reports to be attached  
replaced by NWS Technologies, LLC. Replaced 1-3/8" Studs: P.O. 47062488 / Ht. #P369, P.O.  
47082958 / Ht. #P919; Nuts: P.O. 45172981 / Ht. #X375.

## CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date N/A

Signed [Signature] Senior Specialist Date November 13, 20 07  
Owner or Owner's Designee, Title

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Pennsylvania and employed by HSB CT of Hartford, CT have inspected the components described in this Owner's Report during the period 4-19-06 to 10-24-07, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature] Commissions I, N, PA 2384  
Inspector's Signature National Board, State, Province, and Endorsements

Date 11-19-, 20 07

# **FORM NVR-1 REPORT OF REPAIR ☒ REPLACEMENT ☒** **OF NUCLEAR PRESSURE RELIEF DEVICES**

1. Work performed by: **NWS Technologies, LLC** Purchase Order # 55104586 Rev. 2  
131 Venture Boulevard, Spartanburg, SC 29306
2. Work performed for: First Energy Corporation, Beaver Valley Power Station
- 3/4. Owner - name, address and identification of nuclear power plant: Beaver Valley Power Station,  
P.O. Box 4, Shippingport, PA 15077
5. a: Repaired pressure relief device: Main Steam Safety Valve  
 b: Name of manufacturer: Consolidated / Dresser  
 c: Identifying nos.
- |                    |                |            |              |           |             |
|--------------------|----------------|------------|--------------|-----------|-------------|
| <u>3707RA RT21</u> | <u>BY89645</u> | <u>n/a</u> | <u>steam</u> | <u>6"</u> | <u>2003</u> |
| (type)             | (mfr's S/N)    | (NB#)      | (service)    | (size)    | (yr.built)  |
- d: Construction Code: Section III 1968 n/a n/a A  
 (name/section/division) (edition) (addenda) (Code Cases(s)) (Code Class)
6. ASME Code Section XI applicable for inservice inspection: 1989 n/a n/a  
 (edition) (addenda) (Code Case(s))
7. ASME Code Section XI used for repairs, replacements: 1989 n/a n/a  
 (edition) (addenda) (Code Case(s))
8. Construction Code used for repairs, replacements: 1968 n/a n/a  
 (edition) (addenda) (Code Case(s))
9. Design responsibilities: n/a
10. Opening pressure: 1110 psig  
 Set-pressure adjustment made at: NWS Technologies, LLC using steam
11. Description of work (include name and identifying number of replacement parts): Disassembled, inspected, lapped and  
lapped and passivated nozzle seat, replaced disc with pre-oxidized X750 disc, assembled.  
Certified set-pressure and seat tightness using steam.
12. Remarks: NWS Traveler #: 07-121. New disc s/n: ADZ45

## **CERTIFICATE OF COMPLIANCE**

I, Cesar V. Sierra certify that to the best of my knowledge and belief the statements made in this report are correct and the repair, modification or replacement of the pressure relief devices described above conforms to Section XI of the ASME Code and the National Board Inspection Code "VR" and "NR" rules.

National Board Certificate of Authorization No. 632 to use the "VR" stamp expires April 3, 2009.

National Board Certificate of Authorization No. 81 to use the "NR" stamp expires April 9, 2009.

<u>7/23/07</u>	<u>NWS Technologies, LLC</u>	<u>Cesar V. Sierra</u>	<u>Manager, QA</u>
Date	Repair Organization	Authorized representative	Title

## **CERTIFICATE OF INSPECTION**

I, Charles F. Toegel Jr. holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and certificate of competency issued by the jurisdiction of North Carolina and employed by Hartford Steam Boiler of CT of Hartford, CT have inspected the repair, modification or replacement described in this report on 23 July 2007 and state that to the best of my knowledge and belief, this repair, modification or replacement has been completed in accordance with Section XI of the of the ASME Code and the National Board Inspection Code "VR" and "NR" rules.

By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied, concerning this repair, modification or replacement described in this report. Furthermore, neither the undersigned nor my employer shall be liable in any manner for any personal injury, property damage or loss of any kind arising from or connected with this inspection.

<u>7/23/07</u>	<u>Charles F. Toegel Jr.</u>	<u>NB # 8462, A, N, I NC# 1073</u>
Date	Inspector's Signature	Commissions (NB (incl endorsements), jurisdiction, & no.)

# **FORM N-2 CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL NUCLEAR PARTS AND APPURTENANCES\***

**As Required by the Provisions of the ASME Code, Section III  
Not to Exceed One Day's Production**

Pg. 1 of 2

1. Manufactured and certified by Dresser Flow Control, Dresser Inc. La. Hwy 3225 @ US Hwy 167 N  
P. O. Box 1430 Alexandria, Louisiana 71309-1430  
(name and address of NPT Certificate Holder)

2. Manufactured for First Energy Nuclear Operating Co. Route 189 Shippingport, Pennsylvania 15077  
(name and address of purchaser)

3. Location of installation First Energy Nuclear Operating Co. Beaver Valley Power Station Shippingport, Pennsylvania 15077  
(name and address)

4. Type OS304 ASME SB837 170 KSI N/A 2007  
(drawing no.) (mat'l spec. no.) (tensile strength) (CRN) (year built)

5. ASME Code Section III, Division 1: 1968 None A Vessels, Article 9 N/A  
(edition) (addenda date) (class) (Code Case no.)

6. Fabricated in accordance with Const. Spec. (Div. 2 only) N/A Revision N/A Date N/A  
(no)

7. Remarks: Serial Numbers Are Used In Lieu Of NPT Stamping.

8. Nom. thickness (in.) N/A Min. design thickness (in.) N/A Dia. ID (ft. & in.) N/A Length overall (ft. & in.) N/A

9. When applicable, Certificate Holders' Data Reports are attached for each item of this report:

Part or Appurtenance Serial Number	National Board No. in Numerical Order	Part or Appurtenance Serial Number	National Board No. in Numerical Order
(1) ADZ44 ✓		(26)	
(2) ADZ45 /		(27)	
(3) ADZ46 /		(28)	
(4) ADZ47 /		(29)	
(5)		(30)	
(6)		(31)	
(7)		(32)	
(8)		(33)	
(9)		(34)	
(10)		(35)	
(11)		(36)	
(12)		(37)	
(13)		(38)	
(14)		(39)	
(15)		(40)	
(16)		(41)	
(17)		(42)	
(18)		(43)	
(19)		(44)	
(20)		(45)	
(21)		(46)	
(22)		(47)	
(23)		(48)	
(24)		(49)	
(25)		(50)	

10. Design pressure N/A psi Temp. N/A °F Hydro. Test pressure 2300 PSIG at temp. °F

\* Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8-1/2 x 11, (2) information in Items 2 and 3 on this Data Report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

## FORM N-2 (Back — Pg. 2 of 2)

Certificate Holder's Serial Nos. ADZ44 - ADZ47

## CERTIFICATION OF DESIGN

Design specifications certified by N/A P.E. State N/A Reg. No. N/A  
 (when applicable)

Design report\* certified by N/A P.E. State N/A Reg. No. N/A  
 (when applicable)

## CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this (these) DISC  
 conforms to the rules of construction of the ASME Code, Section III, Division 1.

NPT Certificate of Authorization No. N-2434 Expires 5/20/2007

Date 2/28/07 Name SEE LINE 1 Signed [Signature]  
 (NPT Certificate Holder) (authorized representative)

## CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province  
 of LOUISIANA and employed by HSB CT  
 of HARTFORD, CT have inspected these items described in this Data Report on 2/28/07 and state that to the  
 best of my knowledge and belief, the Certificate Holder has fabricated these parts or appurtenances in accordance with the ASME Code, Section  
 III, Division 1. Each part listed has been authorized for stamping on the date shown above.  
 By signing this certificate, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the equipment described  
 in this Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or  
 loss of any kind arising from or connected with this inspection.

Date 2/28/07 Signed [Signature] Commissions [Signature]  
 (Authorized Nuclear Inspector) (Nat'l Bd. (incl. endorsements) and state or prov. and no.)

**FORM NV-1 CERTIFICATE HOLDERS' DATA REPORT FOR PRESSURE OR VACUUM  
RELIEF VALVES\***

As Required by the Provisions of the ASME Code, Section III, Division 1

Pg. 1 of 2

1. Manufactured and certified by	Dresser Flow Control, Dresser Inc. La. Hwy 3225 @ US Hwy 167 N P. O. Box 1430 Alexandria, Louisiana 71309-1430 <small>(name and address of NV Certificate Holder)</small>						
2. Manufactured for	First Energy Corporation P. O. Box 3611 Akron, Ohio 44309-3611 <small>(name and address of Purchaser)</small>						
3. Location of installation	First Energy Corporation Beaver Valley Power Station Unit # 2 Shippingport, Pennsylvania 15077 <small>(name and address)</small>						
4. Valve	3707RA <small>(model no., series no.)</small>	Orifice size	16.00 Sq in <small>(in.)</small>	Nom. Inlet size	6" <small>(in.)</small>	Outlet size	10" <small>(in.)</small>
5. ASME Code, Section III, Division 1:	1968 <small>(edition)</small>	NO <small>(addenda date)</small>	A, Article 9 (2) <small>(class)</small>		N/A <small>(Code Case no.)</small>		
6. Type	Spring <small>(spring, pilot or power operated)</small>	1110 <small>(set pressure, psig)</small>	33 - 100 <small>(blowdown, psi)</small>	Sat. <small>(rated temp.)</small>	2250 <small>(hydro. Test, psig, inlet)</small>	at	70 °F <small>(year built)</small>
7. Identification	EY-89645 <small>(Cert. Holder's serial no.)</small>	N/A <small>(CRN)</small>	3NC2022 <small>(drawing no.)</small>	N/A <small>(Nat'l. Bd. No.)</small>	2003 <small>(year built)</small>		
8. Control ring settings	Lower - 8 Notches, Upper + 160 Notches						

9. Pressure retaining items:

	Serial No. or Identification	Mat'l. Spec., Including Type or Grade	Tensile Strength
Body	ADP36	ASME SA216 GR WCC	70 ksi
Bonnet or Yoke	ADN81	ASME SA216 GR WCC	70 ksi
Support Rods	ADO29 & ADO30	ASME SA193 GR B6	110 ksi
Nozzle	ADN91	ASME SA182 GR F316	75 ksi
Disk	ADP08	ASTM A565 GR 616	N/A
Spring Washers			
Adjusting Screws			
Spindle			
Spring			
Bolting			
Other Items	Yoke Rod Nut HT #RH99	ASME SA194 GR 2H	N/A
Flanges			
10. Relieving capacity	873,601 Lb/Hr Steam @ 72 <small>(steam or fluid, lb/hr) (psi)</small>	overpressure as certified by the National Board	10-13-1967 <small>(date)</small>

11. Remarks:

<b>CERTIFICATION OF DESIGN</b>			
Design Specification certified by	Louis P. Coplan	P.E. State	California
Design Report certified by	D. K. Sharma	P.E. State	Louisiana
		Reg. no.	16001
		Reg. no.	20244
<b>CERTIFICATE OF COMPLIANCE</b>			
We certify that the statements made in this report are correct and that this valve conforms to the rules for construction of the ASME Code, Section III, Division 1.			
NV Certificate of Authorization No.	1747	Expires	5/20/2004
Date	5/14/04	Name	SEE LINE 1
		Signed	<i>[Signature]</i>
	<small>(NV Certificate Holder)</small>		<small>(authorized representative)</small>

\* Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8 1/2 x 11 in. or larger.

Certificate Holder's Serial No. By-89645

## CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Pressure Vessel Inspectors and the State or Province of LOUISIANA and employed by HSB CT of HARTFORD, CT. have inspected the valve described in this Data Report on 5/17/04 and state that to the

best of my knowledge and belief, the Certificate Holder has constructed this valve in accordance with the ASME Code, Section III, Division 1. By signing this certificate, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the component described in this Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 5/17/04 Signed  
(Authorized Nuclear Inspector)

Commissions

NOTING A "D" LABEL  
(Nat'l. Bd. (Incl. Endorsements) and state or prov. And no.)

Form No. 1809

**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**  
**As Required by the Provisions of the ASME Code Section XI**

1. Owner F.E.N.O.C Date 11-15-2007  
(NAME)  
76 South Main Street – Akron, OH 44308 Sheet 1 of 4  
(ADDRESS)
2. Plant Beaver Valley Power Station (BVPS) Unit No. 1  
(NAME)  
Shippingport, PA 15077 Work Order #200209620, P.O. 55104586  
(ADDRESS) Repair/Replacement Organization P.O. No., Job No., etc.
3. Work Performed By BVPS Construction Service Type Code Symbol Stamp N/A  
(NAME)  
Shippingport, PA 15077 Authorization No. N/A  
(ADDRESS) Expiration Date "
4. Identification of System Main Steam (Class A)
5. (a) Applicable Construction Code Section III 1968 Edition, N/A Addenda, N/A Code Case  
 (b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 1989  
 (c) Applicable Section XI Code Case(s): N/A

## 6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Safety Valve	Dresser	BM-7768	N/A	SV-1MS-105A	1968	Removed	Yes
Safety Valve	Dresser Flow Control	BY-89646	N/A	SV-1MS-105A	2003	Installed	Yes
Disc	Dresser Flow Control	ADZ46	N/A	N/A	2007	Installed	Yes

7. Description of Work Replaced valve and inlet studs & nuts.

8. Tests Conducted: Hydrostatic\* ☐ Pneumatic\* ☐ Nominal Operating Pressure ☒ Exempt ☐  
 Other ☐ Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F

\*Record test pressure and temperature

## FORM NIS-2 (Back)

9. Remarks Code Data Reports attached. The disc on replacement valve S/N BY-89646 was  
Applicable Manufacturer's Data Reports to be attached  
replaced by NWS Technologies, LLC. Replaced 1-3/8" Studs: P.O. 47062488 / Ht. #P369;  
Nuts: P.O. 45172981 / Ht.#X375, P.O. 45138286 / Ht. #P421.

## CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date N/A

Signed [Signature] Senior Specialist Date November 26, 20 07  
Owner or Owner's Designee, Title

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Pennsylvania and employed by HSB CT of Hartford, CT have inspected the components described in this Owner's Report during the period 4-18-06 to 10-24-07, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature] Commissions I, N, P42384  
Inspector's Signature National Board, State, Province, and Endorsements

Date 11-29-, 20 07


**FORM NVR-1 REPORT OF REPAIR ☒ REPLACEMENT ☒**  
**OF NUCLEAR PRESSURE RELIEF DEVICES**

1. Work performed by: **NWS Technologies, LLC** Purchase Order # 55104586 Rev. 2  
131 Venture Boulevard, Spartanburg, SC 29306
2. Work performed for: First Energy Corporation, Beaver Valley Power Station
- 3/4. Owner - name, address and identification of nuclear power plant: Beaver Valley Power Station,  
P.O. Box 4, Shippingport, PA 15077
5. a: Repaired pressure relief device: Main Steam Safety Valve  
b: Name of manufacturer: Consolidated / Dresser  
c: Identifying nos.
- |  |                |            |                 |              |             |
|--|----------------|------------|-----------------|--------------|-------------|
| <u>3707RA RT21</u>                       | <u>BY89646</u> | <u>n/a</u> | <u>steam</u>    | <u>6"</u>    | <u>2003</u> |
| (type)                                   | (mfr's S/N)    | (NB#)      | (service)       | (size)       | (yr. built) |
| d: Construction Code: <u>Section III</u> | <u>1968</u>    | <u>n/a</u> | <u>n/a</u>      | <u>A</u>     |             |
| (name/section/division)                  | (edition)      | (addenda)  | (Code Cases(s)) | (Code Class) |             |
6. ASME Code Section XI applicable for inservice inspection: 1989 n/a n/a  
(edition) (addenda) (Code Case(s))
7. ASME Code Section XI used for repairs, replacements: 1989 n/a n/a  
(edition) (addenda) (Code Case(s))
8. Construction Code used for repairs, replacements: 1968 n/a n/a  
(edition) (addenda) (Code Case(s))
9. Design responsibilities: n/a
10. Opening pressure: 1125 psig  
Set-pressure adjustment made at: NWS Technologies, LLC using steam
11. Description of work (include name and identifying number of replacement parts): Disassembled, inspected, lapped and  
lapped and passivated nozzle seat, replaced disc with pre-oxidized X750 disc, assembled.  
Certified set-pressure and seat tightness using steam.
12. Remarks: NWS Traveler #: 07-122. New disc s/n: ADZ46

**CERTIFICATE OF COMPLIANCE**

I, Cesar V. Sierra certify that to the best of my knowledge and belief the statements made in this report are correct and the repair, modification or replacement of the pressure relief devices described above conforms to Section XI of the ASME Code and the National Board Inspection Code "VR" and "NR" rules.

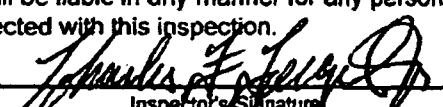
National Board Certificate of Authorization No. 632 to use the "VR" stamp expires April 3, 2009.  
National Board Certificate of Authorization No. 81 to use the "NR" stamp expires April 9, 2009.

7/23/07 NWS Technologies, LLC  Manager, QA  
Date Repair Organization Authorized representative Title

**CERTIFICATE OF INSPECTION**

I, Charles F. Toegel Jr. holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and certificate of competency issued by the jurisdiction of North Carolina and employed by Hartford Steam Boiler of CT of Hartford, CT have inspected the repair, modification or replacement described in this report on 23 July 2007 and state that to the best of my knowledge and belief, this repair, modification or replacement has been completed in accordance with Section XI of the of the ASME Code and the National Board Inspection Code "VR" and "NR" rules.

By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied, concerning this repair, modification or replacement described in this report. Furthermore, neither the undersigned nor my employer shall be liable in any manner for any personal injury, property damage or loss of any kind arising from or connected with this inspection.

7/23/07  NB # 8462, A, N, I NC# 1073  
Date Inspector's Signature Commissions (NB (incl endorsements), jurisdiction, & no.)

**FORM N-2 CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL  
NUCLEAR PARTS AND APPURTENANCES\***  
As Required by the Provisions of the ASME Code, Section III  
Not to Exceed One Day's Production

Pg. 1 of 2

1. Manufactured and certified by Dresser Flow Control, Dresser Inc. La. Hwy 3225 @ US Hwy 167 N  
P. O. Box 1430 Alexandria, Louisiana 71309-1430  
(name and address of NPT Certificate Holder)
2. Manufactured for First Energy Nuclear Operating Co. Route 169 Shippingport, Pennsylvania 15077  
(name and address of purchaser)
3. Location of installation First Energy Nuclear Operating Co. Beaver Valley Power Station Shippingport, Pennsylvania 15077  
(name and address)
4. Type OS304 ASME SB837 170 KSI N/A 2007  
(drawing no.) (mat'l spec. no.) (tensile strength) (CRN) (year built)
5. ASME Code Section III, Division 1: 1988 None A Vessels, Article 9 N/A  
(edition) (addenda date) (class) (Code Case no.)
6. Fabricated in accordance with Const. Spec. (Div. 2 only) N/A Revision N/A Date N/A  
(no)
7. Remarks : Serial Numbers Are Used In Lieu Of NPT Stamping.

8. Nom. thickness (in.) N/A Min. design thickness (in.) N/A Dia. ID (ft. & in.) N/A Length overall (ft. & in.) N/A
9. When applicable, Certificate Holders' Data Reports are attached for each item of this report:

Part or Appurtenance Serial Number	National Board No. in Numerical Order	Part or Appurtenance Serial Number	National Board No. in Numerical Order
(1) ADZ44 ✓		(26)	
(2) ADZ45 /		(27)	
(3) ADZ46 /		(28)	
(4) ADZ47 /		(29)	
(5)		(30)	
(6)		(31)	
(7)		(32)	
(8)		(33)	
(9)		(34)	
(10)		(35)	
(11)		(36)	
(12)		(37)	
(13)		(38)	
(14)		(39)	
(15)		(40)	
(16)		(41)	
(17)		(42)	
(18)		(43)	
(19)		(44)	
(20)		(45)	
(21)		(46)	
(22)		(47)	
(23)		(48)	
(24)		(49)	
(25)		(50)	

10. Design pressure N/A psi Temp. N/A °F. Hydro. Test pressure 2300 PSIG at temp. °F

\* Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8-1/2 x 11, (2) information in Items 2 and 3 on this Data Report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

## FORM N-2 (Back — Pg. 2 of 2)

Certificate Holder's Serial Nos. ADZ44 - ADZ47

## CERTIFICATION OF DESIGN

Design specifications certified by N/A P.E. State N/A Reg. No. N/A  
(when applicable)  
Design report\* certified by N/A P.E. State N/A Reg. No. N/A  
(when applicable)

## CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this ( these ) DISC  
conforms to the rules of construction of the ASME Code, Section III, Division 1.

NPT Certificate of Authorization No. N-2434 Expires 5/20/2007  
Date 2/28/07 Name SEE LINE 1 Signed [Signature]  
(NPT Certificate Holder) (authorized representative)

## CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province  
of LOUISIANA and employed by HSB CT  
of HARTFORD, CT have inspected these items described in this Data Report on 2/28/07 and state that to the  
best of my knowledge and belief, the Certificate Holder has fabricated these parts or appurtenances in accordance with the ASME Code, Section  
III, Division 1. Each part listed has been authorized for stamping on the date shown above.  
By signing this certificate, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the equipment described  
in this Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or  
loss of any kind arising from or connected with this inspection.

Date 2/28/07 Signed [Signature] Commissions [Signature]  
(Authorized Nuclear Inspector) (Nat'l Bd. (incl. endorsements) and state or prov. and no.)

**FORM NV-1 CERTIFICATE HOLDERS' DATA REPORT FOR PRESSURE OR VACUUM  
RELIEF VALVES\***

As Required by the Provisions of the ASME Code, Section III, Division 1

Pg. 1 of 2

1. Manufactured and certified by	Dresser Flow Control, Dresser Inc. La. Hwy 3225 @ US Hwy 167 N P. O. Box 1430 Alexandria, Louisiana 71309-1430 <small>(name and address of NV Certificate Holder)</small>				
2. Manufactured for	First Energy Corporation P. O. Box 3611 Akron, Ohio 44309-3611 <small>(name and address of Purchaser)</small>				
3. Location of installation	First Energy Corporation Beaver Valley Power Station Unit # 2 Shippingport, Pennsylvania 15077 <small>(name and address)</small>				
4. Valve	3707RA <small>(model no., serial no.)</small>	Orifice size	16.00 Sq In <small>(in.)</small>	Nom. Inlet size	6" Outlet size 10" <small>(in.)</small>
5. ASME Code, Section III, Division 1:	1968 <small>(edition)</small>	NO <small>(addenda date)</small>	A, Article 9 (2) <small>(class)</small>	N/A <small>(Code Case no.)</small>	
6. Type	Spring <small>(spring, pilot or power operated)</small>	1125 <small>(set pressure, psig)</small>	34 - 101 <small>(blowdown, psi)</small>	Sat. <small>(rated temp.)</small>	2250 at 70 °F <small>(hydro. Test, psig, inlet)</small>
7. Identification	BY-89646 <small>(Cert. Holder's serial no.)</small>	N/A <small>(CRN)</small>	3NC2022 <small>(drawing no.)</small>	N/A <small>(Nat'l. Bd. No.)</small>	2003 <small>(year built)</small>
8. Control ring settings	Lower - 8 Notches; Upper + 160 Notches				

9. Pressure retaining items:

	Serial No. or Identification	Mat'l. Spec., Including Type or Grade	Tensile Strength
Body	ADP34	ASME SA216 GR WCC	70 ksi
Bonnet or Yoke	ADN85	ASME SA216 GR WCC	70 ksi
Support Rods	ADO27 & ADO28	ASME SA193 GR B6	110 ksi
Nozzle	ADN89	ASME SA182 GR F316	75 ksi
Disk	ADP06	ASTM A565 GR 616	N/A
Spring Washers			
Adjusting Screws			
Spindle			
Spring			
Bolting			
Other Items	Yoke Rod Nut HT #RH99	ASME SA194 GR 2H	N/A
Flanges			
10. Relieving capacity	873,601 Lb/Hr Steam @ 58 <small>(steam or fluid, lb/hr) (psi)</small>	overpressure as certified by the National Board	10-13-1967 <small>(date)</small>

11. Remarks:

CERTIFICATION OF DESIGN			
Design Specification certified by	Louis P. Copian	P.E. State	California
Design Report certified by	D. K. Sharma	P.E. State	Louisiana
		Reg. no.	16001
		Reg. no.	20244
CERTIFICATE OF COMPLIANCE			
We certify that the statements made in this report are correct and that this valve conforms to the rules for construction of the ASME Code, Section III, Division 1.			
NV Certificate of Authorization No.	1747	Expires	5/20/2004
Date	5/14/04	Name	SEE LINE 1
		Signed	<i>[Signature]</i>
		<small>(NV Certificate Holder)</small>	<small>(authorized representative)</small>

\* Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8 1/2 x 11 (2) information is clear and legible.

Certificate Holder's Serial No. By-89646

## CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Pressure Vessel Inspectors and the State or Province of LOUISIANA and employed by HSB CT of HARTFORD, CT. have inspected the valve described in this Data Report on 5/17/04 and state that to the best of my knowledge and belief, the Certificate Holder has constructed this valve in accordance with the ASME Code, Section III, Division 1. By signing this certificate, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the component described in this Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date

5/17/04

Signed

B. D. [Signature]  
(Authorized Nuclear Inspector)

Commissions

LOUISIANA 'A' 'N' CAGC  
(Natl. Bd. (incl. Endorsements) and state or prov. And no.)

Form No. 1822

**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**  
**As Required by the Provisions of the ASME Code Section XI**

1. Owner F.E.N.O.C. Date 10/31/2007  
(NAME)  
76 South Main Street – Akron, OH 44308 Sheet 1 of 1  
(ADDRESS)
2. Plant Beaver Valley Power Station Unit No. 1  
(NAME)  
Shippingport, PA 15077 Work Order #200134005  
(ADDRESS) Repair/Replacement Organization P.O. No., Job No., etc.
3. Work Performed By BVPS Construction Service Type Code Symbol Stamp Not Applicable  
(NAME)  
Shippingport, PA 15077 Authorization No. N/A  
(ADDRESS) Expiration Date N/A
4. Identification of System Chilled Water (Q3)
5. (a) Applicable Construction Code ANSI B31.1 1971 Edition, S'71 Addenda, N/A Code Case  
 (b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 1989  
 (c) Applicable Section XI Code Case(s) N-416-2

## 6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Valve	Crane	N/A	N/A	1AC-339	1976	Removed	No
Valve	Velan	07-003-1	N/A	1AC-339	2007	Installed	No
Pipe	Energy & Process	N/A	N/A	Ht #A62935	2006	Installed	No

7. Description of Work Replaced valve and pipe.

8. Tests Conducted: Hydrostatic\* ☐ Pneumatic\* ☐ Nominal Operating Pressure ☒ Exempt ☐  
 Other ☐ Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F  
\*Record test pressure and temperature

## FORM NIS-2 (Back)

9. Remarks No Code Data Report available. No previous NIS-2 Data Reports. Valve was designed to  
ASME B16.34 and API 600.

Applicable Manufacturer's Data Reports to be attached

## CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A

Expiration Date N/A

Signed [Signature]

Owner or Owner's Designee, Title

Senior Specialist Date November 7, 20 07

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Pennsylvania and employed by HSB CT of Hartford, CT have inspected the components described in this

Owner's Report during the period 4-19-06 to 10-24-07, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature]  
Inspector's Signature

Commissions

I, N, PA 2384  
National Board, State, Province, and Endorsements

Date 11-14-, 20 07

Form No. 1846

**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**  
**As Required by the Provisions of the ASME Code Section XI**

1. Owner F.E.N.O.C Date 10/24/2007  
(NAME)  
76 South Main Street – Akron, OH 44308 Sheet 1 of 1  
(ADDRESS)
2. Plant Beaver Valley Power Station (BVPS) Unit No. 1  
(NAME)  
Shippingport, PA 15077 Work Order #200014451  
(ADDRESS) Repair/Replacement Organization P.O. No., Job No., etc.
3. Work Performed By BVPS Construction Service Type Code Symbol Stamp N/A  
(NAME)  
Shippingport, PA 15077 Authorization No. N/A  
(ADDRESS) Expiration Date "
4. Identification of System River Water (Q3)
5. (a) Applicable Construction Code ANSI B31.1 1967 Edition, S'71 Addenda, N/A Code Case  
 (b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 1989  
 (c) Applicable Section XI Code Case(s): N/A

## 6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Rubber Expansion Joint	Garlock	N/A	N/A	REJ-1RW-4B1	1994	Removed	No
Rubber Expansion Joint	Garlock	N/A	N/A	REJ-1RW-4B1	2003	Installed	No

7. Description of Work Replaced expansion joint, spacer plate, and inlet/outlet flange studs & nuts.

8. Tests Conducted: Hydrostatic\* ☐ Pneumatic\* ☐ Nominal Operating Pressure ☒ Exempt ☐  
 Other ☐ Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F

\*Record test pressure and temperature

## FORM NIS-2 (Back)

9. Remarks No Code Data Report available. Previous NIS-2 Data Report No: 703. Replaced Spacer  
Applicable Manufacturer's Data Reports to be attached  
Plates: P.O. 45204175 / Ht. #T6842/6B, P.O. 45163730 / Ht. #4102172; 1-1/4" Studs: D149199-28,  
Ht. #J662, P.O. 101186 / Ht. #PWK; Nuts: P.O. 47030430 / Ht. #A201

## CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date N/A

Signed [Signature] Senior Specialist Date November 26, 20 07  
Owner or Owner's Designee, Title

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Pennsylvania and employed by HSB CT of Hartford, CT have inspected the components described in this Owner's Report during the period 4-19-06 to 10-24-07, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature] Commissions I, N, P 42384  
Inspector's Signature National Board, State, Province, and Endorsements

Date 11-29-, 20 07

Form No. 1852

**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**  
**As Required by the Provisions of the ASME Code Section XI**

1. Owner F.E.N.O.C Date 10/23/06  
(NAME)
- 76 South Main Street – Akron, OH 44308 Sheet 1 of 1  
(ADDRESS)
2. Plant Beaver Valley Power Station (BVPS) Unit No. 1  
(NAME)
- Shippingport, PA 15077 Work Order #200018239  
(ADDRESS) Repair/Replacement Organization P.O. No., Job No., etc.
3. Work Performed By FENOC Maintenance Type Code Symbol Stamp N/A  
(NAME)
- Shippingport, PA 15077 Authorization No. N/A  
(ADDRESS)
- Expiration Date "
4. Identification of System River Water (Class 3)
5. (a) Applicable Construction Code ANSI B31.1 1967 Edition, S71 Addenda, N/A Code Case  
 (b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 1989  
 (c) Applicable Section XI Code Case(s): N/A

## 6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Check Valve	C & S Valve	92-2019-06(Q)-1	N/A	1RW-106	---	Corrected	No
Plate	Crane Nuclear	D5027	N/A	HT# 0631	2006	Installed	No
Plate	Crane Nuclear	D5028	N/A	HT# 0631	2006	Installed	No

7. Description of Work Install Plates in spare valve.

8. Tests Conducted: Hydrostatic\* ☐ Pneumatic\* ☐ Nominal Operating Pressure ☐ Exempt ☒  
 Other ☐ Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F

\*Record test pressure and temperature

## FORM NIS-2 (Back)

9. Remarks No Code Data Report available. Previous NIS-2 Data Report: 1756, 1413, 1318, 1220,Applicable Manufacturer's Data Reports to be attached654. Plate PO# 45178744.

## CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/ACertificate of Authorization No. N/AExpiration Date N/A

Signed

Senior Specialist

Date

November 2

, 20

06Owner or Owner's Designee, Title

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Pennsylvania and employed by HSB CT of

Hartford, CT

have inspected the components described in this

Owner's Report during the period

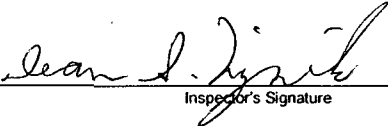
4-19-06

to

11-2-06

, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Inspector's Signature

Commissions

I, N, PA 2384National Board, State, Province, and Endorsements

Date

11-2-

, 20

06

Form No. 1926

**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**  
**As Required by the Provisions of the ASME Code Section XI**

1. Owner F.E.N.O.C Date 12/18/2007  
(NAME)  
76 South Main Street - Akron, OH 44308 Sheet 1 of 1  
(ADDRESS)

2. Plant Beaver Valley Power Station (BVPS) Unit No. 1  
(NAME)  
Shippingport, PA 15077 Work Order #200168313  
(ADDRESS) Repair/Replacement Organization P.O. No., Job No., etc.

3. Work Performed By BVPS Maintenance Type Code Symbol Stamp N/A  
(NAME)  
Shippingport, PA 15077 Authorization No. N/A  
(ADDRESS) Expiration Date "

4. Identification of System Component Cooling (Q3)

5. (a) Applicable Construction Code ANSI B31.1 1973 Edition, S'73 Addenda, N/A Code Case  
 (b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 1989  
 (c) Applicable Section XI Code Case(s): N/A

## 6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built*	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Check Valve	TRW Mission	N/A	N/A	ICCR-4	1976	Removed	No
Check Valve	Crane Nuclear	B5373	N/A	ICCR-4	2007	Installed	No

7. Description of Work Replaced valve with spare.

8. Tests Conducted: Hydrostatic\* ☐ Pneumatic\* ☐ Nominal Operating Pressure ☒ Exempt ☐  
 Other ☐ Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F

\*Record test pressure and temperature

## FORM NIS-2 (Back)

9. Remarks No Code Data Report available. \*Year installed.

Applicable Manufacturer's Data Reports to be attached

## CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/ACertificate of Authorization No. N/AExpiration Date N/A

Signed



Owner or Owner's Designee, Title

Senior Specialist

Date December 20, 20 07

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Pennsylvania and employed by HSB CT of Hartford, CT have inspected the components described in this Owner's Report during the period 4-18-06 to 10-24-07, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.



Inspector's Signature

Commissions

I, N, PA2384

National Board, State, Province, and Endorsements

Date 1-2-, 20 08

Form No. 1933

**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**  
**As Required by the Provisions of the ASME Code Section XI**

1. Owner F.E.N.O.C Date 01/16/2007  
(NAME)  
76 South Main Street – Akron, OH 44308 Sheet 1 of 2  
(ADDRESS)
2. Plant Beaver Valley Power Station (BVPS) Unit No. 1  
(NAME)  
Shippingport, PA 15077 Work Order #200176406  
(ADDRESS) Repair/Replacement Organization P.O. No., Job No., etc.
3. Work Performed By BVPS-Maintenance Type Code Symbol Stamp N/A  
(NAME)  
Shippingport, PA 15077 Authorization No. N/A  
(ADDRESS) Expiration Date "
4. Identification of System River Water (Q3)
5. (a) Applicable Construction Code Section III 1977 Edition, S'79 Addenda, --- Code Case  
 (b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 1989  
 (c) Applicable Section XI Code Case(s):

## 6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Check Valve	Crane Valve	D0551	N/A	1RW-158	---	Removed	Yes
Check Valve	Crane Nuclear	D4670	N/A	1RW-158	2006	Installed	Yes

7. Description of Work Replaced valve and inlet/outlet flange studs/nuts.

8. Tests Conducted: Hydrostatic\* ☐ Pneumatic\* ☐ Nominal Operating Pressure ☒ Exempt ☐  
 Other ☐ Pressure          psi Test Temp.          °F

\*Record test pressure and temperature

## FORM NIS-2 (Back)

9. Remarks Code Data Report attached. Replacement 5/8" Studs: P.O. 45183672, Ht. #105C; Nuts:

Applicable Manufacturer's Data Reports to be attached

P.O. 45198614, Ht. #X929.

## CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/ACertificate of Authorization No. N/A Expiration Date N/ASigned [Signature] Senior Specialist Date February 26, 20 07  
Owner or Owner's Designee, Title

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Pennsylvania and employed by HSB CT of

Hartford, CT have inspected the components described in this

Owner's Report during the period 11-3-04 to 4-18-06, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature]  
Inspector's SignatureCommissions I, N, PA 2384  
National Board, State, Province, and EndorsementsDate 2-28-, 20 07

**FORM NPV-1 CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PUMPS OR VALVES\***  
**As Required by the Provisions of the ASME Code, Section III, Division 1**

Pg. 1 of 2

1. Manufactured and certified by CRANE Nuclear, Inc., 860 Remington Boulevard, Bolingbrook, IL 60440  
(name and address of NPT Certificate Holder)
2. Manufactured for First Energy Corporation, PO Box 345 Shippingport, PA 15077  
(name and address of purchaser)
3. Location of installation Beaver Valley Nuclear Power Plant, Route 168, Shippingport, PA 15077  
(name and address)
4. Model No., Series No., or Type K15-CEP Drawing CB02791 Rev. B CRN N/A
5. ASME Code, Section III, Division 1: 1977 Summer 1979 3 N/A  
(edition) (addenda date) (class) (Code Case no.)
6. Pump or valve Duo-Chek Valve Nominal inlet size 3 Outlet size 3  
(in.) (in.)

## 7. Material:

(a) valve (b) pump	Body Casting	SA351 CF8M N/A	Bonnet Cover	N/A N/A	Disk Bolting	SA351 CF8M N/A	Bolting	SA479 TP 316
(a) Cert. Holder's Serial No.	(b) Nat'l Board No.	(c) Body/Casing Serial No.	(d) Bonnet/Cover Serial No.	(e) Disk Serial No.				
D4669	N/A	D4670	N/A	D4671 & D4672				

\* Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8 1/2 x 11, (2) information in items 1 through 4 on this Data Report is included on each sheet. (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

This form (E00037) may be obtained from the Order Dept. ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300.

(1) For manually operated valves only.

Form No. 1988

**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**  
**As Required by the Provisions of the ASME Code Section XI**

1. Owner F.E.N.O.C. Date 10/18/2007  
(NAME)  
76 South Main Street – Akron, OH 44308 Sheet 1 of 1  
(ADDRESS)
2. Plant Beaver Valley Power Station Unit No. 1  
(NAME)  
Shippingport, PA 15077 Work Order #200211882  
(ADDRESS) Repair/Replacement Organization P.O. No., Job No., etc.
3. Work Performed By BVPS Construction Service Type Code Symbol Stamp Not Applicable  
(NAME)  
Shippingport, PA 15077 Authorization No. N/A  
(ADDRESS) Expiration Date N/A
4. Identification of System Recirculation Spray (Class C)
5. (a) Applicable Construction Code Section III 1968 Edition, W'68 Addenda, N/A Code Case  
 (b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 1989  
 (c) Applicable Section XI Code Case(s) N/A

## 6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Heat Exchanger	Industrial Processes	6301-1	3179	IRS-E-1A	1971	Corrected	Yes

7. Description of Work
- Replaced flange studs & nuts and seal welded new diaphragms.

8. Tests Conducted: Hydrostatic\* ☐ Pneumatic\* ☐ Nominal Operating Pressure ☒ Exempt ☐  
 Other ☐ Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F

\*Record test pressure and temperature

## FORM NIS-2 (Back)

9. Remarks Previous NIS-2 Report Nos: 1818, 1697, 1577, 1417, 1251, 945, 854, 697, 690, 595, 557,  
Applicable Manufacturer's Data Reports to be attached  
435, and 295. Copy of original Code Data Report in 1577. Replaced 3/4" Studs: P.O. 45210736 /  
Ht. #251F; Nuts: P.O. 45204172 / 443C.

## CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A

Expiration Date N/A

Signed [Signature]

Owner or Owner's Designee, Title

Senior Specialist Date November 08, 20 07

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Pennsylvania and employed by HSB CT of Hartford, CT have inspected the components described in this Owner's Report during the period 4-18-06 to

10-24-07 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature]  
Inspector's Signature

Commissions NB9428 ANIB PA2384  
National Board, State, Province, and Endorsements

Date 11-14-, 20 07

Form No. 1989

**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**  
**As Required by the Provisions of the ASME Code Section XI**

1. Owner F.E.N.O.C. Date 10/17/2007  
(NAME)  
76 South Main Street -- Akron, OH 44308 Sheet 1 of 1  
(ADDRESS)
2. Plant Beaver Valley Power Station Unit No. 1  
(NAME)  
Shippingport, PA 15077 Work Order #200211884  
(ADDRESS) Repair/Replacement Organization P.O. No., Job No., etc.
3. Work Performed By BVPS Construction Service Type Code Symbol Stamp Not Applicable  
(NAME)  
Shippingport, PA 15077 Authorization No. N/A  
(ADDRESS) Expiration Date N/A
4. Identification of System Recirculation Spray (Class C)
5. (a) Applicable Construction Code Section III 1968 Edition, W'68 Addenda, N/A Code Case  
 (b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 1989  
 (c) Applicable Section XI Code Case(s) N/A

## 6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Heat Exchanger	Industrial Processes	6301-3	3181	IRS-E-1C	1971	Corrected	Yes

7. Description of Work Replaced flange studs & nuts and seal welded new diaphragms.

8. Tests Conducted: Hydrostatic\* ☐ Pneumatic\* ☐ Nominal Operating Pressure ☒ Exempt ☐  
 Other ☐ Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F

\*Record test pressure and temperature

## FORM NIS-2 (Back)

9. Remarks Previous NIS-2 Report: 1819, 1698, 1578, 1418, 1252, 946, 855, 698, 596, 486, 288, and  
156. Copy of original Code Data Report in 1578. Replaced 3/4" Studs: P.O. 47145149 / Ht. #OB65;  
Nuts: P.O. 45204172 / Ht. #443C.

## CERTIFICATE OF COMPLIANCE

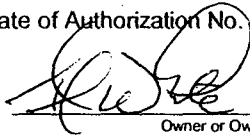
I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A

Expiration Date N/A

Signed



Owner or Owner's Designee, Title

Senior Specialist Date November 08, 20 07

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Pennsylvania and employed by HSB CT of Hartford, CT have inspected the components described in this Owner's Report during the period 4-18-06 to

10-24-07 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.



Inspector's Signature

Commissions

NB 9428 ANIB PA 2384  
 National Board, State, Province, and Endorsements

Date

11-12-

, 20 07

Form No. 1993

**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**  
**As Required by the Provisions of the ASME Code Section XI**

1. Owner F.E.N.O.C Date 10-29-2007  
(NAME)  
76 South Main Street – Akron, OH 44308 Sheet 1 of 3  
(ADDRESS)
2. Plant Beaver Valley Power Station (BVPS) Unit No. 1  
(NAME)  
Shippingport, PA 15077 Work Order 200200991  
(ADDRESS) Repair/Replacement Organization P.O. No., Job No., etc.
3. Work Performed By BVPS Maintenance Type Code Symbol Stamp N/A  
(NAME)  
Shippingport, PA 15077 Authorization No. N/A  
(ADDRESS) Expiration Date "
4. Identification of System Reactor Coolant (Class A)
5. (a) Applicable Construction Code Section III 1968 Edition, S'68 Addenda, N/A Code Case  
 (b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 1989  
 (c) Applicable Section XI Code Case(s): N/A

## 6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Relief Valve	Target Rock	6	N/A	RV-IRC-551C	1973	Removed	Yes
Relief Valve	Target Rock	0569C-001-1-4	N/A	RV-IRC-551C	2007	Installed	Yes

7. Description of Work Replaced relief valve for testing purposes and inlet studs & nuts.

8. Tests Conducted: Hydrostatic\* ☐ Pneumatic\* ☐ Nominal Operating Pressure ☒ Exempt ☐  
 Other ☐ Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F

\*Record test pressure and temperature

## FORM NIS-2 (Back)

9. Remarks Code Data Report attached. Previous NIS-2 Data Report Nos: 1587, 1141, 594, 313, and  
Applicable Manufacturer's Data Reports to be attached  
262. Replaced 1-3/8" Studs: 47120711 / Ht. #J963, P.O. 47082958 / Ht. #P919, P.O. 45189502 /  
Ht. #R756, Nuts: P.O. 47120711 / Ht. #S663, P.O. 45172981 / Ht. #X375.

## CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date N/A

Signed [Signature] Senior Specialist Date November 15, 20 07  
Owner or Owner's Designee, Title

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Pennsylvania and employed by HSB CT of Hartford, CT have inspected the components described in this

Owner's Report during the period 4-19-06 to 10-24-07, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature] Commissions I, N, PA 2384  
Inspector's Signature National Board, State, Province, and Endorsements

Date 11-19-, 20 07

**FORM NV-1 CERTIFICATE HOLDERS' DATA REPORT FOR PRESSURE OR VACUUM RELIEF VALVES\***  
**As Required by the Provisions of the ASME Code, Section III, Division 1**

**Pg. 1 of 3**

1. Manufactured and certified by Target Rock; 1966E Broadhollow Rd.; E. Farmingdale, NY 11735  
 (name and address of NV Certificate Holder)
2. Manufactured for First Energy; Route 168; Shippingport, PA  
 (name and address of Purchaser)
3. Location of installation Beaver Valley Power Station; Route 168; Shippingport, PA  
 (name and address)
4. Valve 0569C-001-1 Orifice size 2.443 Nom. Inlet size 6 Outlet size 6  
 (Model no., series no.) (in.) (in.) (in.)
5. ASME Code, Section III, Division 1: 1968 Summer 1968 A None  
 (edition) (addenda date) (class) (Code Case no.)
6. Type Pilot Operated 2485 120 650°F 3325 at 100°F max.  
 (spring, pilot or power operated) (set pressure, psig) (blowdown, psi) (rated temp) (hydro test, psig, inlet)
7. Identification 4 N/A 0569C-001 Rev. D N/A 2007  
 (Cert. Holder's serial no.) (CRN) (drawing no.) (Natl'l. Bd. no.) (year built)
8. Control ring settings N/A
9. Pressure retaining items:
 

Pressure retaining items:	Serial No. Or Identification	Mat'l. Spec. Including Type or Grade	Tensile Strength
Body	339	SA351 CF8M	75 ksi
Bonnet or Yoke	11	SA105	70 ksi
Support Rods			
Nozzle			
Disk	5	SA 564 630	140 ksi
Spring Washers			
Adjusting Screws			
Spindle			
Spring			
Bolting	See page 2 of 3		
Other Items	See page 2 of 3		
10. Relieving capacity 345,000 lbs/hr overpressure as certified by the National Board (69C) 10/07/2005  
 (date)
11. Remarks: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**CERTIFICATION OF DESIGN**

Design Specification certified by F.W. Gardner P.E. State PA Reg. No. 036614-E

Design Report certified by Not applicable P.E. State N/A Reg. No. N/A

**CERTIFICATE OF COMPLIANCE**

We certify that the statements made in this report are correct and that this pump or valve conforms to the rules for construction of the ASME Code, Section III, Division 1.

N Certificate of Authorization No. N-1949 Expires 12/12/2007

Date 9/4/07 Name Target Rock Signed John DeBonis  
 (Certificate Holder) (authorized representative)

\* Supplemental information in form of lists, sketches, or drawings may be used provided (1) size is 8½ x 11, (2) information in items 1 through 4 on this Data Report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form

(12/88) This form (E00037) may be obtained from the Order Dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300  
 REPRINT 6/93

FORM NV-1 (Pg. 2 of 3)

Certificate Holder's Serial No. 0569C-001-1 s/n 4

1. Manufactured and certified by Target Rock; 1966E Broadhollow Rd.; E. Farmingdale, NY 11735  
(name and address of NV Certificate Holder)
2. Manufactured for First Energy; Route 168; Shippingport, PA  
(name and address of Purchaser)
3. Location of installation Beaver Valley Power Station; Rout 168; Shippingport, PA  
(name and address)
4. Valve 0569C-001-1 Orifice size 2.443 Nom. Inlet size 6 Outlet size 6  
(Model no., series no.) (in.) (in.) (in.)

Pressure Retaining Item		Serial No. or Identification	Material Spec. Including Type or Grade	Tensile Strength
Main Seat	200323-1	26	SA479 304L	70 ksi
Pilot Body	303839-2	7	SA479 304	75 ksi
Bonnet Cap	200324-1	11	SA105	70 ksi
End Cap	303835-1	1	SA479 316	75 ksi
Hex Nut	100-0076	n/a	SA194 2H	n/a
Hex Bolt	100501-1	n/a	SA193 B7	125 ksi
Stud	206189-2	n/a	SA193 B7	125 ksi
Stud	206189-1	n/a	SA193 B7	125 ksi
Stud	100482-2	n/a	SA193 B7	125 ksi
Stud	100482-1	n/a	SA193 B7	125 ksi

Certificate Holder's Serial No. 0569C-001-1 s/n 4

1. Manufactured and certified by Target Rock; 1966E Broadhollow Rd.; E. Farmingdale, NY 11735  
(name and address of NV Certificate Holder)
2. Manufactured for First Energy; Route 168; Shippingport, Pa  
(name and address of Purchaser)
3. Location of installation Beaver Valley Power Station; Route 168; Shippingport, PA  
(name and address)
4. Valve 0569C-001-1 Orifice size 2.443 Nom. Inlet size 6 Outlet size 6  
(Model no., series no.) (in.) (in.) (in.)

**CERTIFICATE OF INSPECTION**

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Province of New York and employed by OneBeacon America Insurance Company of Boston, MA have inspected the pump, or valve, described in this Data Report on 9/4/07, and state that to the best of my knowledge and belief, the Certificate Holder has constructed this pump, or valve, in accordance with the ASME Code, Section III, Division 1.

By signing this certificate, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the component described in this Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 9/4/07 Signed [Signature] Commissions N.Y. 5102  
(Authorized Inspector) (Nat'l. Bd.(incl. endorsements) and state or prov. and no.)

Form No. 2003

**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**  
**As Required by the Provisions of the ASME Code Section XI**

1. Owner F.E.N.O.C Date 10/26/2007  
(NAME)  
76 South Main Street – Akron, OH 44308 Sheet 1 of 1  
(ADDRESS)
2. Plant Beaver Valley Power Station (BVPS) Unit No. 1  
(NAME)  
Shippingport, PA 15077 Work Order #200213863  
(ADDRESS) Repair/Replacement Organization P.O. No., Job No., etc.
3. Work Performed By BVPS Maintenance Type Code Symbol Stamp N/A  
(NAME)  
Shippingport, PA 15077 Authorization No. N/A  
(ADDRESS) Expiration Date "
4. Identification of System Main Steam (Q2)
5. (a) Applicable Construction Code ANSI B31.1 1967 Edition, S'71 Addenda, N/A Code Case  
 (b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 1989  
 (c) Applicable Section XI Code Case(s): N/A

## 6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Gate Valve	Crane Valve	N/A	N/A	IMS-26	1976	Corrected	No

7. Description of Work Replaced body/bonnet studs & nuts.

8. Tests Conducted: Hydrostatic\* ☐ Pneumatic\* ☐ Nominal Operating Pressure ☐ Exempt ☒  
 Other ☐ Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F

\*Record test pressure and temperature

## FORM NIS-2 (Back)

9. Remarks No Code Data Report available. Replaced 7/8" Nuts: P.O. 45161672 / Ht. #217A; Studs:  
P.O. 47134616 / Ht. #Z660.  
Applicable Manufacturer's Data Reports to be attached

## CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date N/A

Signed [Signature] Senior Specialist Date November 2, 20 07  
Owner or Owner's Designee, Title

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Pennsylvania and employed by HSB CT of Hartford, CT have inspected the components described in this Owner's Report during the period 4-19-06 to 10-24-07, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature] Commissions I, N, PA 2384  
Inspector's Signature National Board, State, Province, and Endorsements

Date 11-5-, 20 07

Form No. 2005

**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**  
**As Required by the Provisions of the ASME Code Section XI**

1. Owner F.E.N.O.C. Date 10/09/07  
(NAME)  
76 South Main Street – Akron, OH 44308 Sheet 1 of 2  
(ADDRESS)
2. Plant Beaver Valley Power Station Unit No. 1  
(NAME)  
Shippingport, PA 15077 Work Order #200207913  
(ADDRESS) Repair/Replacement Organization P.O. No., Job No., etc.
3. Work Performed By BVPS Maintenance Type Code Symbol Stamp Not Applicable  
(NAME)  
Shippingport, PA 15077 Authorization No. N/A  
(ADDRESS) Expiration Date N/A
4. Identification of System River Water (Q3)
5. (a) Applicable Construction Code ASME Section III 1977 Edition, S79 Addenda, N/A Code Case  
 (b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 1989  
 (c) Applicable Section XI Code Case(s) N/A

## 6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Check Valve	Clow Corp	82-2669-02N	N/A	IRW-159	N/A	Removed	Yes
Check Valve	Crane Nuclear	D2080	N/A	IRW-159	2003	Installed	Yes

7. Description of Work
- Replaced Check Valve.

8. Tests Conducted: Hydrostatic\* ☐ Pneumatic\* ☐ Nominal Operating Pressure ☒ Exempt ☐  
 Other ☐ Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F

\*Record test pressure and temperature

## FORM NIS-2 (Back)

9. Remarks Code Data Report attached.

Applicable Manufacturer's Data Reports to be attached

## CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/ACertificate of Authorization No. N/AExpiration Date N/A

Signed



Owner or Owner's Designee, Title

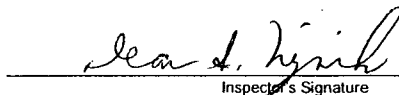
Senior Specialist Date October 19, 20 07

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Pennsylvania and employed by HSB CT of Hartford, CT have inspected the components described in this

Owner's Report during the period 4-19-06 to 10-22-07, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.



Inspector's Signature

Commissions

I, N, PA 2384

National Board, State, Province, and Endorsements

Date 10-22-, 20 07

Pg. 1 of 2

D2082 &amp; D2083

This form (E00037) may be obtained from the Order Dept. ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300.

FORM NPV-1 (Back) -- Pg. 2 of 2

Certificate Holder's Serial No. D2080

8. Design conditions \_\_\_\_\_ psi \_\_\_\_\_ °F or valve pressure class ANSI 150 (1)  
(pressure) (temperature)
9. Cold working pressure 275 psi at 100°F
10. Hydrostatic test 425 psi. Disk differential test pressure 305 psi
11. Remarks: PO No. 7087502, Item No. 1 SO No. 14531-01  
Mark No.: Valve ID: VC-15X-Q  
Hinge/Stop Pin Retainers Ht. No.: 7105H

CERTIFICATION OF DESIGN

Design Specifications certified by Francis Salmon P.E. State PA Reg. no. 3385-E  
 Design Report certified by N/A P.E. State N/A Reg. no. N/A

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this pump or valve conforms to the rules for construction of the ASME Code, Section III, Division 1.

N Certificate of Authorization No. N-2899 Expires September 24, 2005  
 Date 03/10/03 Name CRANE Nuclear, Inc. Signed Jerome A. Kurowski  
 (N Certificate Holder) (authorized representative)  
 Jerome A. Kurowski, P.E.

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Illinois and employed by HSBCT of Hartford, CT have inspected the pump, or valve, described in this Data Report on 03/10/03 and state that to the best of my knowledge and belief, the Certificate Holder has constructed this pump, or valve, in accordance with the ASME Code, Section III, Division 1.

By signing this certificate, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the component described in this Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or loss of any kind arising from or connected with this inspection.

Date 03/10/03 Signed Robert Rainey Commissions IL 932  
 (Authorized Nuclear Inspector) (Nat'l. Bd. (incl. endorsements) and state or prov. and no.)  
 Robert Rainey

(1) For manually operated valves only.

Form No. 2013

**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**  
**As Required by the Provisions of the ASME Code Section XI**

1. Owner F.E.N.O.C. Date 10/9/2007  
(NAME)  
76 South Main Street – Akron, OH 44308 Sheet 1 of 1  
(ADDRESS)
2. Plant Beaver Valley Power Station Unit No. 1  
(NAME)  
Shippingport, PA 15077 Work Order # 200205525  
(ADDRESS) Repair/Replacement Organization P.O. No., Job No., etc.
3. Work Performed By BVPS Valve Team Type Code Symbol Stamp Not Applicable  
(NAME)  
Shippingport, PA 15077 Authorization No. N/A  
(ADDRESS) Expiration Date N/A
4. Identification of System Main Steam (Q2)
5. (a) Applicable Construction Code ANSI B31.1 1967 Edition, S'71 Addenda, N/A Code Case  
 (b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 1989  
 (c) Applicable Section XI Code Case(s) N/A

## 6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Valve	Enertech	11496	N/A	1MS-80	2006	Corrected	Yes

7. Description of Work Replaced valve inlet/outlet flange studs and nuts.

8. Tests Conducted: Hydrostatic\* ☐ Pneumatic\* ☐ Nominal Operating Pressure ☒ Exempt ☒  
 Other ☐ Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F

\*Record test pressure and temperature

## FORM NIS-2 (Back)

9. Remarks Code Data Report attached to NIS-2 Report #1811. Previous NIS-2 Report Nos: 144, 601,  
1018, 1209, 1406, 1557, 1726, and 1811. Replaced 3/4" Nuts: P.O. 45204172 / Ht. #443C; Studs:  
P.O. 45204172 / Ht. #445C.

## CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date N/A

Signed [Signature] Senior Specialist Date November 15, 20 07  
 Owner or Owner's Designee, Title

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Pennsylvania and employed by HSB CT of Hartford, CT have inspected the components described in this Owner's Report during the period 4-19-06 to

(0-24-07) and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature] Commissions I, N, P 42384  
 Inspector's Signature National Board, State, Province, and Endorsements

Date 11-19-, 20 07

Form No. 2015

**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**  
**As Required by the Provisions of the ASME Code Section XI**

1. Owner F.E.N.O.C Date 11/14/2007  
(NAME)  
76 South Main Street – Akron, OH 44308 Sheet 1 of 1  
(ADDRESS)
2. Plant Beaver Valley Power Station (BVPS) Unit No. 1  
(NAME)  
Shippingport, PA 15077 Work Order #200135694  
(ADDRESS) Repair/Replacement Organization P.O. No., Job No., etc.
3. Work Performed By BVPS Maintenance Type Code Symbol Stamp N/A  
(NAME)  
Shippingport, PA 15077 Authorization No. N/A  
(ADDRESS) Expiration Date "
4. Identification of System Reactor Coolant (Class A)
5. (a) Applicable Construction Code Section III 1968 Edition, N/A Addenda, N/A Code Case  
 (b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 1989  
 (c) Applicable Section XI Code Case(s): N/A

6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Pump	Westinghouse	3-618J931G01	N/A	IRC-P-1C	1976	Corrected	Yes

7. Description of Work Replaced two #1 seal housing bolts.

8. Tests Conducted: Hydrostatic\* ☐ Pneumatic\* ☐ Nominal Operating Pressure ☐ Exempt ☒  
 Other ☐ Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F

\*Record test pressure and temperature

## FORM NIS-2 (Back)

9. Remarks No Code Data Report available. Previous NIS-2 Data Report Nos: 1398 and 914.

Applicable Manufacturer's Data Reports to be attached

Replaced bolts : P.O. 109467 / Ht. #95127, serial numbers 11742 and 11743.

## CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/ACertificate of Authorization No. N/A Expiration Date N/A

Signed [Signature] Senior Specialist Date November 26, 20 07  
Owner or Owner's Designee, Title

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Pennsylvania and employed by HSB CT of Hartford, CT have inspected the components described in this

Owner's Report during the period 4-19-06 to 10-24-07, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature] Commissions IN, PA 2384  
Inspector's Signature National Board, State, Province, and Endorsements

Date 11-29-, 20 07

Form No. 2016

**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**  
**As Required by the Provisions of the ASME Code Section XI**

1. Owner F.E.N.O.C Date 11/20/2007  
(NAME)  
76 South Main Street – Akron, OH 44308 Sheet 1 of 1  
(ADDRESS)
2. Plant Beaver Valley Power Station (BVPS) Unit No. 1  
(NAME)  
Shippingport, PA 15077 Work Order #200124376  
(ADDRESS) Repair/Replacement Organization P.O. No., Job No., etc.
3. Work Performed By BVPS Maintenance Type Code Symbol Stamp N/A  
(NAME)  
Shippingport, PA 15077 Authorization No. N/A  
(ADDRESS) Expiration Date "
4. Identification of System Main Steam (Q2)
5. (a) Applicable Construction Code ANSI B31.1 1967 Edition, S'71 Addenda, N/A Code Case  
 (b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 1989  
 (c) Applicable Section XI Code Case(s): N/A

## 6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Governor Valve	Dresser-Rand (Terry Steam Turbine)	T38492 (Turbine)	N/A	IMS-464	1976	Corrected	No
Plug	Dresser-Rand	N/A	N/A	N/A	2006	Installed	No

7. Description of Work
- Replaced valve stem/plug assembly.

8. Tests Conducted: Hydrostatic\* ☐ Pneumatic\* ☐ Nominal Operating Pressure ☐ Exempt ☒  
 Other ☐ Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F

\*Record test pressure and temperature

## FORM NIS-2 (Back)

9. Remarks No Code Data Report available. Previous NIS-2 Data Report Nos: 1745 and 974.

Applicable Manufacturer's Data Reports to be attached

## CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/ACertificate of Authorization No. N/AExpiration Date N/A

Signed



Owner or Owner's Designee, Title

Senior Specialist

Date November 20, 20 07

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Pennsylvania and employed by HSB CT of Hartford, CT have inspected the components described in this

Owner's Report during the period 4-19-06 to 10-24-07, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.



Inspector's Signature

Commissions



National Board, State, Province, and Endorsements

Date 11-21-, 20 07

Form No. 2017

**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**  
**As Required by the Provisions of the ASME Code Section XI**

1. Owner F.E.N.O.C Date 10/29/2007  
(NAME)
- 76 South Main Street – Akron, OH 44308 Sheet 1 of 1  
(ADDRESS)
2. Plant Beaver Valley Power Station (BVPS) Unit No. 1  
(NAME)
- Shippingport, PA 15077 Work Order Nos: 200038342  
(ADDRESS) Repair/Replacement Organization P.O. No., Job No., etc.
3. Work Performed By BVPS Maintenance Type Code Symbol Stamp N/A  
(NAME)
- Shippingport, PA 15077 Authorization No. N/A  
(ADDRESS)
- Expiration Date "
4. Identification of System Feedwater (Q2)
5. (a) Applicable Construction Code ANSI B31.1 1967 Edition, S'71 Addenda, N/A Code Case  
 (b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 1989  
 (c) Applicable Section XI Code Case(s): N/A

## 6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Turbine	Ingersoll-Rand	T-36555	N/A	1FW-T-2	1972	Corrected	No
Gland Case	Dresser Rand	N/A	N/A	N/A	2007	Installed	No

7. Description of Work Replaced gland case assembly.

8. Tests Conducted: Hydrostatic\* ☐ Pneumatic\* ☐ Nominal Operating Pressure ☒ Exempt ☐  
 Other ☐ Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F

\*Record test pressure and temperature

## FORM NIS-2 (Back)

9. Remarks No Code Data Report available. Previous NIS-2 Data Report Nos: 961, and 296. Original  
Applicable Manufacturer's Data Reports to be attached  
manufacture was Non-Code, piping is ANSI B31.1.

## CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date N/A

Signed [Signature] Senior Specialist Date November 15, 20 07  
Owner or Owner's Designee, Title

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Pennsylvania and employed by HSB CT of Hartford, CT have inspected the components described in this Owner's Report during the period 4-18-06 to 10-24-07, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature] Commissions I, N, P + 2384  
Inspector's Signature National Board, State, Province, and Endorsements

Date 11-19-, 20 07

Form No. 2018

**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**  
**As Required by the Provisions of the ASME Code Section XI**

1. Owner F.E.N.O.C Date 11/08/2007  
(NAME)  
76 South Main Street – Akron, OH 44308 Sheet 1 of 1  
(ADDRESS)

2. Plant Beaver Valley Power Station (BVPS) Unit No. 1  
(NAME)  
Shippingport, PA 15077 Work Order #200135497  
(ADDRESS) Repair/Replacement Organization P.O. No., Job No., etc.

3. Work Performed By BVPS Maintenance Type Code Symbol Stamp N/A  
(NAME)  
Shippingport, PA 15077 Authorization No. N/A  
(ADDRESS) Expiration Date "

4. Identification of System Main Steam (Q2)

5. (a) Applicable Construction Code ANSI B16.5 1968 Edition, N/A Addenda, N/A Code Case

(b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 1989

(c) Applicable Section XI Code Case(s): N/A

6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Check Valve	Schutte & Koerting	N690563	N/A	TV-1MS-101C	1976	Corrected	No
Disc	Flowserve	N/A	N/A	Ht. #M0419	2004	Installed	No

7. Description of Work Replaced disc.

8. Tests Conducted: Hydrostatic\* ☐ Pneumatic\* ☐ Nominal Operating Pressure ☐ Exempt ☒  
 Other ☐ Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F

\*Record test pressure and temperature

## FORM NIS-2 (Back)

9. Remarks No Code Data Report available. Previous NIS-2 Data Report No: 1609.

Applicable Manufacturer's Data Reports to be attached

## CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/ACertificate of Authorization No. N/A Expiration Date N/ASigned [Signature] Senior Specialist Date November 13, 20 07  
Owner or Owner's Designee, Title

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Pennsylvania and employed by HSB CT of Hartford, CT have inspected the components described in this

Owner's Report during the period 4-19-06 to 10-24-07, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature] Commissions I, N, P 12384  
Inspector's Signature National Board, State, Province, and Endorsements

Date 11-14-, 20 07

Form No. 2019

**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**  
**As Required by the Provisions of the ASME Code Section XI**

1. Owner F.E.N.O.C. Date 10/10/07  
(NAME)  
76 South Main Street – Akron, OH 44308 Sheet 1 of 1  
(ADDRESS)
2. Plant Beaver Valley Power Station Unit No. 1  
(NAME)  
Shippingport, PA 15077 Work Order #200138765  
(ADDRESS) Repair/Replacement Organization P.O. No., Job No., etc.
3. Work Performed By FENCO Maintenance Type Code Symbol Stamp Not Applicable  
(NAME)  
Shippingport, PA 15077 Authorization No. N/A  
(ADDRESS) Expiration Date N/A
4. Identification of System Reactor Plant Component and Neutron Tank Cooling System (Q3)
5. (a) Applicable Construction Code ANSI B31.1 1967 Edition, S'71 Addenda, N/A Code Case  
 (b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 1989  
 (c) Applicable Section XI Code Case(s) N/A

## 6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Expansion Joint	Garlock, Inc.	5-3973	N/A	REJ-1CC-16B	1995	Removed	No
Expansion Joint	Garlock, Inc.	06-1968	N/A	REJ-1CC-16B	2006	Installed	No

7. Description of Work Replaced 18" Expansion Joint, Studs and Nuts.

8. Tests Conducted: Hydrostatic\* ☐ Pneumatic\* ☐ Nominal Operating Pressure ☒ Exempt ☐  
 Other ☐ Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F

\*Record test pressure and temperature

## FORM NIS-2 (Back)

9. Remarks No Code Data Report available. Previous NIS-2 Data Report #634. Replaced 1-1/8"

Applicable Manufacturer's Data Reports to be attached


Studs: P.O. 47037233 / Ht. #M584, P.O. 7123870 / Ht. #J218; Nuts: P.O. D149199-299 / Ht.#73265 32-1 RCC, P.O. 45102947 Ht. #TRS

## CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/ACertificate of Authorization No. N/AExpiration Date N/A

Signed



Owner or Owner's Designee, Title

Senior Specialist Date October 12, 20 07

## CERTIFICATE OF INSERVICE INSPECTION

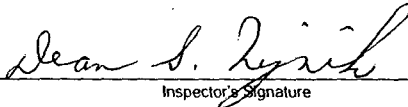
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Pennsylvania and employed by HSB CT of

Hartford, CT

have inspected the components described in this

Owner's Report during the period 4-18-06 to 10-12-07, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.



Inspector's Signature

Commissions

I, N, PA 2384

National Board, State, Province, and Endorsements

Date 10-12-, 20 07

Form No. 2024

**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**  
**As Required by the Provisions of the ASME Code Section XI**

1. Owner F.E.N.O.C Date 11/06/2007  
(NAME)  
76 South Main Street – Akron, OH 44308 Sheet 1 of 4  
(ADDRESS)

2. Plant Beaver Valley Power Station (BVPS) Unit No. 1  
(NAME)  
Shippingport, PA 15077 Work Order #200200990  
(ADDRESS) Repair/Replacement Organization P.O. No., Job No., etc.

3. Work Performed By BVPS Maintenance Type Code Symbol Stamp N/A  
(NAME)  
Shippingport, PA 15077 Authorization No. N/A  
(ADDRESS) Expiration Date "

4. Identification of System Reactor Coolant (Class A)

5. (a) Applicable Construction Code Section III 1968 Edition, S'68 Addenda, N/A Code Case  
 (b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 1989  
 (c) Applicable Section XI Code Case(s): N/A

## 6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Relief Valve	Target Rock	5	N/A	RV-1RC-551A	1973	Removed	Yes
Relief Valve	Target Rock	0569C-001-1-1	N/A	RV-1RC-551A	2005	Installed	Yes
Main Stem	Target Rock	4	N/A	N/A	2006	Installed	Yes

7. Description of Work Replaced valve with spare for testing purposes. Also replaced inlet studs/nuts.  
Target Rock replaced main stem prior to installation.

8. Tests Conducted: Hydrostatic\* ☐ Pneumatic\* ☐ Nominal Operating Pressure ☒ Exempt ☐  
 Other ☐ Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F

\*Record test pressure and temperature

## FORM NIS-2 (Back)

9. Remarks Code Data Reports attached. Previous NIS-2 Data Report Nos: 1740, 1255, and 892. Valve S/N 1  
Applicable Manufacturer's Data Reports to be attached  
was rebuilt by Target Rock under P.O. 55104545 prior to installation and new stem S/N 4 was installed.  
Replaced 1-3/8" inlet Nuts: P.O. 47120711 / Ht. # S663, P.O. 45172981 / Ht. #X375; Studs: P.O. 45189502 /  
Ht. #R756, P.O. 47120711 / Ht. #J963, P.O. 47082958 / Ht. #P919.

## CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date N/A

Signed [Signature] Senior Specialist Date November 7, 20 07  
Owner or Owner's Designee, Title

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Pennsylvania and employed by HSB CT of Hartford, CT have inspected the components described in this Owner's Report during the period 4-19-06 to 10-24-07, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature] Commissions I, N, P 12384  
Inspector's Signature National Board, State, Province, and Endorsements

Date 11-14-, 20 07

FORM NV-1 CERTIFICATE HOLDERS' DATA REPORT FOR PRESSURE OR VACUUM RELIEF VALVES\*  
As Required by the Provisions of the ASME Code, Section III, Division 1

Pg. 1 of 3

1. Manufactured and certified by Target Rock; 1966E Broadhollow Rd.; E. Farmingdale, NY 11735  
(name and address of NV Certificate Holder)
2. Manufactured for First Energy; Route 168; Shipping port, PA  
(name and address of Purchaser)
3. Location of installation Beaver Valley Power Station; Route 168; Shippingport, PA  
(name and address)
4. Valve 0569C-001-1 Orifice size 2.443 Nom. Inlet size 6 Outlet size 6  
(Model no., series no.) (in.) (in.) (in.)
5. ASME Code, Section III, Division 1: 1968 Summer 1968 A None  
(edition) (addenda date) (class) (Code Case no.)
6. Type Pilot Operated 2485 120 650°F 3325 at 100°F max.  
(spring, pilot or power operated) (set pressure, psig) (blowdown, psi) (rated temp) (hydro test, psig, inlet)
7. Identification 1 N/A 0569C-001 Rev. B N/A 2005  
(Cert. Holder's serial no.) (CRN) (drawing no.) (Nat'l. Bd. no.) (year built)
8. Control ring settings N/A
9. Pressure retaining items:

	Serial No. Or Identification	Mat'l. Spec. Including Type or Grade	Tensile Strength
Body	<u>1</u>	<u>SA351 CF8M</u>	<u>75 ksi</u>
Bonnet or Yoke	<u>8</u>	<u>SA105</u>	<u>70 ksi</u>
Support Rods			
Nozzle			
Disk	<u>3</u>	<u>SA 564 630</u>	<u>140 ksi</u>
Spring Washers			
Adjusting Screws			
Spindle			
Spring			
Bolting	<u>See page 2 of 3</u>		
Other Items	<u>See page 2 of 3</u>		
10. Relieving capacity 345,000 lbs/hr overpressure as certified by the National Board (69C) 10/07/2005  
(date)
11. Remarks:

CERTIFICATION OF DESIGN

Design Specification certified by F.W. Gardner P.E. State PA Reg. No. 036614-E

Design Report certified by Not applicable P.E. State N/A Reg. No. N/A

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this pump or valve conforms to the rules for construction of the ASME Code, Section III, Division 1.

N Certificate of Authorization No. N-1949 Expires 12/12/2007

Date 12/16/2005 Name Target Rock Signed R. E. Glazier, QA Manager  
(Certificate Holder) (authorized representative)

\* Supplemental information in form of lists, sketches, or drawings may be used provided (1) size is 8½ x 11, (2) information in items 1 through 4 on this Data Report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form

## FORM NV-1 ( Pg. 2 of 3 )

Certificate Holder's Serial No. 0569C-001-1; s/n 1

1. Manufactured and certified by Target Rock; 1966E Broadhollow Rd.; E. Farmingdale, NY 11735  
(name and address of NV Certificate Holder)
2. Manufactured for First Energy; Route 168; Shippingport, PA  
(name and address of Purchaser)
3. Location of installation Beaver Valley Power Station; Rout 168; Shippingport, PA  
(name and address)
4. Valve 0569C-001-1 Orifice size 2.443 Nom. Inlet size 6 Outlet size 6  
(Model no., series no.) (in.) (in.) (in.)

Pressure Retaining Item		Serial No. or Identification	Material Spec. Including Type or Grade	Tensile Strength
Main Seat	200323-1	25	SA479 304L	70 ksi
Pilot Body	303839-2	2	SA479 304	75 ksi
Bonnet Cap	200324-1	8	SA105	70 ksi
End Cap	303835-1	5	SA479 316	75 ksi
Hex Nut	100-0076	n/a	SA194 2H	n/a
Hex Bolt	100501-1	n/a	SA193 B7	125 ksi
Stud	206189-2	n/a	SA193 B7	125 ksi
Stud	206189-1	n/a	SA193 B7	125 ksi
Stud	100482-2	n/a	SA193 B7	125 ksi
Stud	100482-1	n/a	SA193 B7	125 ksi

Certificate Holder's Serial No. 0569C-001-1 S/N 1

1. Manufactured and certified by Target Rock, 1966E Broadhollow Rd., E. Farmingdale, NY 11735  
(name and address of NV Certificate Holder)
2. Manufactured for First Energy, Route 168, Shippingport, Pa  
(name and address of Purchaser)
3. Location of installation Beaver Valley Power Station, Route 168, Shippingport, PA  
(name and address)
4. Valve 0569C-001-1 Orifice size 2.443 Nom. Inlet size 6 Outlet size 6  
(Model no., series no.) (in.) (in.) (in.)

**CERTIFICATE OF INSPECTION**

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Province of New York and employed by OneBeacon America Insurance Company of Boston, MA have inspected the pump, or valve, described in this Data Report on 12/16/2005, and state that to the best of my knowledge and belief, the Certificate Holder has constructed this pump, or valve, in accordance with the ASME Code, Section III, Division 1.

By signing this certificate, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the component described in this Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 12/16/05 Signed [Signature] Commissions N.Y. 5102  
(Authorized Inspector) (Nat'l. Bd. (incl. endorsements) and state or prov. and no.)

**FORM N-2 CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL  
NUCLEAR PARTS AND APPURTENANCES\***  
As Required by the Provisions of the ASME Code, Section III  
Not to Exceed One Day's Production

Pg. 1 of 2

1. Manufactured and certified by Target Rock; 1966E Broadhollow Rd.; E. Farmingdale, NY 11735  
(name and address of NPT Certificate Holder)
2. Manufactured for FirstEnergy Corporation; Route 168; Shippingport, PA  
(name and address of Purchaser)
3. Location of installation Bever Valley Power Station; route 168; Shippingport, PA  
(name and address)
4. Type 303833-1 SA564 630 140 ksi N/A 2006  
(drawing no.) (mat'l. spec. no.) (tensile strength) (CRN) (year built)
5. ASME Code, Section III, Division 1: 1968 Summer 1968 A None  
(edition) (addenda date) (class) (Code Case no.)
6. Fabricated in accordance with Const. Spec. (Div. 2 only) N/A Revision N/A Date N/A  
(no.)
7. Remarks: Main Stem  
Spare part for valve model no. 0569C-001-1
8. Nom. Thickness (in.) N/A Min. design thickness (in.) N/A Dia. ID (ft & in.) N/A Length overall (ft & in.) N/A
9. When applicable, Certificate Holders' Data Reports are attached for each item of this report:

Part or Appurtenance Serial Number	National Board No. In Numerical Order	Part or Appurtenance Serial Number	National Board No. In Numerical Order
(1) 4	N/A	(26)	
(2) ~ ~ ~		(27)	
(3)		(28)	
(4)		(29)	
(5)		(30)	
(6)		(31)	
(7)		(32)	
(8)		(33)	
(9)		(34)	
(10)		(35)	
(11)		(36)	
(12)		(37)	
(13)		(38)	
(14)		(39)	
(15)		(40)	
(16)		(41)	
(17)		(42)	
(18)		(43)	
(19)		(44)	
(20)		(45)	
(21)		(46)	
(22)		(47)	
(23)		(48)	
(24)		(49)	
(25)		(50)	

10. Design pressure N/A psi. Temp. N/A °F Hydro. Test pressure 3325 psig at ambient temp. °F  
(when applicable)

\* Supplemental information in form of lists, sketches, or drawings may be used provided (1) size is 8½ x 11, (2) information in items 1 through 4 on this Data Report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

## FORM N-2 (BACK - Pg. 2 of 2)

Certificate Holder's Serial Nos. 303833-1 s/n 4

## CERTIFICATION OF DESIGN

Design specifications certified by F. W. Gardner P.E. State PA Reg. No. 03664-E  
 (when applicable)  
 Design report\* certified by not applicable P.E. State --- Reg. No. ---  
 (when applicable)

## CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this (these) Part  
 conforms to the rules for construction of the ASME Code, Section III, Division 1.

NPT Certificate of Authorization No. N-1948 Expires 12/12/2007

Date 4/13/2006 Name Target Rock Signed [Signature]  
 (NPT Certificate Holder) R. E. Glazier, QA Manager  
 (authorized representative)

## CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Province of New York and employed by OneBeacon America Insurance Co. of Boston, MA have inspected the pump, or valve, described in this Data Report on AUGUST 29, 2006 and state that to the best of my knowledge and belief, the Certificate Holder has fabricated these parts or appurtenances in accordance with the ASME Code, Section III, Division 1. Each part listed has been authorized for stamping on the date shown above.

By signing this certificate, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the equipment described in this Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or loss of any kind arising from or connected with this inspection.

Date 8/29/06 Signed [Signature] Commissions N.Y. 5102  
 (Authorized Inspector) (Nat'l. Bd. (incl. endorsements) and state or prov. and no.)

Form No. 2025

**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**  
**As Required by the Provisions of the ASME Code Section XI**

1. Owner F.E.N.O.C. Date 10/17/2007  
(NAME)  
76 South Main Street – Akron, OH 44308 Sheet 1 of 1  
(ADDRESS)
2. Plant Beaver Valley Power Station Unit No. 1  
(NAME)  
Shippingport, PA 15077 Work Order #200239865  
(ADDRESS) Repair/Replacement Organization P.O. No., Job No., etc.
3. Work Performed By BVPS Maintenance Type Code Symbol Stamp Not Applicable  
(NAME)  
Shippingport, PA 15077 Authorization No. N/A  
(ADDRESS) Expiration Date N/A
4. Identification of System Main Steam (Q2)
5. (a) Applicable Construction Code ANSI B31.1 1967 Edition, S'71 Addenda, N/A Code Case  
 (b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 1989  
 (c) Applicable Section XI Code Case(s) N/A

## 6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Check Valve	Enertech	11075	N/A	IMS-19	2001	Corrected	Yes

7. Description of Work Replaced flange studs and nuts.

8. Tests Conducted: Hydrostatic\* ☐ Pneumatic\* ☐ Nominal Operating Pressure ☒ Exempt ☒  
 Other ☐ Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F

\*Record test pressure and temperature

## FORM NIS-2 (Back)

9. Remarks Previous NIS-2 Report Nos: 1709, 952, 824, 759, 497, 263, and 143. Replaced 3/4" Studs:  
Applicable Manufacturer's Data Reports to be attached  
P.O. 45187878 / Ht. #153C; Nuts: P.O. 45204172 / Ht. #443C, P.O. 45178058 / Ht. #X510, P.O.  
45190667 / Ht. #Z403. Valve is supplied as ASME Section III 1971E-S'72A and installed in an  
ANSI B31.1 system.

## CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date N/A

Signed [Signature] Senior Specialist Date November 14, 20 07  
Owner or Owner's Designee, Title

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Pennsylvania and employed by HSB CT of Hartford, CT have inspected the components described in this Owner's Report during the period 4-19-06 to

10-24-07 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature] Commissions I, N, PA 2384  
Inspector's Signature National Board, State, Province, and Endorsements

Date 11-19-, 20 07

Form No. 2026

**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**  
**As Required by the Provisions of the ASME Code Section XI**

1. Owner FirstEnergy Nuclear Operating Company Date October 24, 2007  
(NAME)  
76 S. Main St. Akron, OH 44308 Sheet 1 of 2  
(ADDRESS)
2. Plant Beaver Valley Power Station Unit No. Unit 1  
(NAME)  
Route 168, Shippingport, PA 15077 ECP 06-0236, WO# 200223096, 097, 102, 194, 195  
(ADDRESS) Repair/Replacement Organization P.O. No., Job No., etc.
3. Work Performed By Westinghouse Electric Comp. Type Code Symbol Stamp N/A  
(NAME)  
4350 Northern Pike, Monroeville, PA 15146 Authorization No. N/A  
(ADDRESS) Expiration Date N/A
4. Identification of System Reactor Coolant System (Class 1)
5. (a) Applicable Construction Code (Vessel) Section III 1965 Edition, W 66 Addenda, 1401 Code Case  
Applicable Construction Code (Piping) ANSI B31.1 1967 Edition, S 71 Addenda,        Code Case
- (b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 1989 Edition, No Addenda
- (c) Applicable Section XI Code Case(s): N-504-2, N-638-1 (as modified by Relief Request BV1-PZR-01), N-416-2 (not needed)

## 6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Pressurizer Vessel	Westinghouse	1311	68-50	IRC-TK-1	1971	Corrected	Yes
Pressurizer Piping: Spray Safety A Safety B Safety C PORV	N/A	N/A	N/A	4" RC-72-1502-Q1 6" RC-97-1502-Q1 6" RC-98-1502-Q1 6" RC-99-1502-Q1 6" RC-104-1502-Q1	1976	Corrected	No
Weld Overlays: Spray Safety A Safety B Safety C PORV	N/A	N/A	N/A	RC-72-E-OL-01 RC-97-1-OL-01 RC-98-1-OL-01 RC-99-1-OL-01 RC-104-1-OL-01	2007	Installed	No

7. Description of Work Full structural weld overlays (Alloy 52M) were applied to the pressurizer spray safety, and relief nozzles, extending from the carbon steel nozzle material to the stainless steel piping. In addition, linear indication near "A" safety nozzle identified by magnetic particle examination was removed via buffing (separated R/R plan attached)

8. Tests Conducted: Hydrostatic\* ☐ Pneumatic\* ☐ Nominal Operating Pressure ☒ Exempt ☐

(22) Other ☐ Pressure        psi Test Temp.        °F

\*Record test pressure and temperature

## FORM NIS-2 (Back)

9. Remarks Form N-1A Manufacturer's Data Report (pressurizer) and R/R plans (6) attached.

Applicable Manufacturer's Data Reports to be attached

## CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/ACertificate of Authorization No. N/A

Expiration Date

N/A

Signed

  
Owner or Owner's Designee, Title  
ERIC S. LOETHLEIN

Date

OCTOBER 25, 20 07

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of PA and employed by HSB CT of

HARTFORD, CT. have inspected the components described in this

Owner's Report during the period 4-19-06 to 10-24-07, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

  
Inspector's Signature

Commissions

NB9428 ANIB PA2384  
National Board, State, Province, and Endorsements

Date

10-29, 20 07

# FORM N-1A MANUFACTURERS' DATA REPORT FOR NUCLEAR VESSELS

Alternate Form for Single Chamber Completely Shop-Fabricated Vessels Only

As required by the Provisions of the ASME Code Rules

Manufactured by Westinghouse Electric Corporation, Tampa Division, Tampa, Florida  
(Name and address of Manufacturer)

Manufactured for Duquesne Light

1a. Applicable ASME Code; Section III, Edition 1958, Addenda Date W-66, Case Nos. 1401

2. Type Vertical Vessel No. ( 1311 ) ( SA-533 ) ( SA-533 ) Nail, Bd. No. 68-50 Year Built 1971  
(Name or Vessel) (Serial) (Plate & Mark No.)  
Nom. Corr. Total Length

3. Shell: Material Gr A, CL. 17.5 T.S. 80000 Thk. 4.19 in. Allow 0 in. Diam. 7 Ft. 0 In. Length 32 Ft. 2.0 ft.  
(Kind & Spec. No.) (Min. of range specified)

4. Seams: Long Weld-Dbl Buttl. T. Yes X.R. Yes Efficiency 100 %  
(U Class B)

5. Heads: (a) Material SA-216 Gr WCC T.S. 70000 (b) Material SA-216 Gr WCC T.S. 70000  
Girth Weld-Dbl Buttl. T. Yes X.R. Yes No. of Courses 3

6. Heads: (a) Material SA-216 Gr WCC T.S. 70000 (b) Material SA-216 Gr WCC T.S. 70000

Location (Top, bottom, ends)	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press (Convex or Concave)
(a) <u>Top</u>	<u>3.13</u>					<u>3' 6"</u>		<u>Concave</u>
(b) <u>Bottom</u>	<u>4.13</u>					<u>3' 6"</u>		<u>Concave</u>

If removable, bolts used \_\_\_\_\_ Other fastening \_\_\_\_\_  
(Material, Spec. No., T.B., Size, Number) (Describe or Attach Sketch)

7. Constructed for design press. 2485 psi at max. temp. 680 °F. at temp. of +10 °F. Head-20  
Sharp impact Shell-D lb Hydrostatic } Test Press 3106  
Pneumatic or }  
Combination }  
8. Safety or Relief Valve Outlets: Number 3, 1 Size 6" Location Upper Head @ 70 °F Min

## 9. Nozzles:

Purpose (Inlet, Outlet, Drain)	Number	Diam. or Size	Type	Material	Thickness	Reinforcement Material	How Attached
<u>Surge</u>	<u>1</u>	<u>14.00</u>	<u>Weld End</u>	<u>SA-216</u>	<u>1.25</u>	<u>SA-216</u>	<u>Integr</u>
<u>Spray</u>	<u>1</u>	<u>4.00</u>	<u>Weld End</u>	<u>Gr WCC</u>	<u>.531</u>	<u>Gr WCC</u>	<u>Cns</u>

10. Inspection Manholes, No. 1 Size 16" Location Upper Head

Openings: Handholes, No. \_\_\_\_\_ Size \_\_\_\_\_ Location \_\_\_\_\_

Threaded, No. \_\_\_\_\_ Size \_\_\_\_\_ Location \_\_\_\_\_

11. Supports: Skirt Yes Lugs - Legs - Other - Attached On Lower Head (Welded)  
(Yes or No) (Number) (Number) (Describe) (Where & How)

12. Remarks: The primary function of this vessel is to attain and maintain operating coolant pressure for steady state operation, absorb the primary coolant volume surge and limit pressure variation during the initial transient before any effective response in the reactor control system.

(Brief description of purpose of the vessel—Scale Contents.)

1. If Postweld Heat-Treated.

2. List other internal or external pressure with coincident temperature when applicable.

We certify that the statements made in this report are correct and that all details of material design, construction, and workmanship of this vessel conform to the ASME Code for Nuclear Vessels—Section III.

Date May 25 19 71 Signed Westinghouse Electric Corporation By P. S. Walker  
(Manufacturer)

Certificate of Authorization Expires N-122 April 10, 1972

## CERTIFICATION OF DESIGN

Design information on file at Westinghouse Electric Corporation, Tampa Division, Tampa, Florida

Stress analysis report on file at Westinghouse Electric Corporation, Tampa Division, Tampa, Florida

Design specifications certified by (U) Atomic Power Division Prof. Eng. Katz State Pa. Reg. No. 04478

Stress analysis report certified by (U) Atomic Power Division Prof. Eng. A. Lehmjohann State Pa. Reg. No. 13436

## CERTIFICATE OF SHOP INSPECTION

VESSEL MADE BY Westinghouse Electric Corp. at Tampa, Fla.

Form No. 2027

**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**  
**As Required by the Provisions of the ASME Code Section XI**

1. Owner F.E.N.O.C Date 11/05/2007  
(NAME)  
76 South Main Street - Akron, OH 44308 Sheet 1 of 1  
(ADDRESS)

2. Plant Beaver Valley Power Station (BVPS) Unit No. 1  
(NAME)  
Shippingport, PA 15077 Work Order #200207490  
(ADDRESS) Repair/Replacement Organization P.O. No., Job No., etc.

3. Work Performed By BVPS Maintenance Type Code Symbol Stamp N/A  
(NAME)  
Shippingport, PA 15077 Authorization No. N/A  
(ADDRESS) Expiration Date "

4. Identification of System River Water (Q3)

5. (a) Applicable Construction Code ANSI B31.1 1967 Edition, S'71 Addenda, N/A Code Case  
 (b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 1989  
 (c) Applicable Section XI Code Case(s): N/A

6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Check Valve	C & S Valve	89-0929-01(Q)-01	N/A	IRW-106	1989	Corrected	No

7. Description of Work Replaced valve inlet/outlet flange studs & nuts.

8. Tests Conducted: Hydrostatic\* ☐ Pneumatic\* ☐ Nominal Operating Pressure ☐ Exempt ☒  
 Other ☐ Pressure          psi Test Temp.          °F

\*Record test pressure and temperature

## FORM NIS-2 (Back)

9. Remarks No Code Data Report available. Previous NIS-2 Data Report Nos: 1756, 1220, and 654.  
Applicable Manufacturer's Data Reports to be attached  
Valve was manufactured to ANSI B31.1 1973E and B16.34 1981E. Replaced 1-1/4" Studs: P.O.  
47030430 / Ht. #K339, P.O. D149199-288 / Ht. #84413-QSA; Nuts: P.O. 47048563 / Ht. #A201.

## CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date N/A

Signed [Signature] Senior Specialist Date November 7, 20 07  
Owner or Owner's Designee, Title

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Pennsylvania and employed by HSB CT of Hartford, CT have inspected the components described in this Owner's Report during the period 4-18-06 to 10-24-07, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature] Commissions I, N, PA 2384  
Inspector's Signature National Board, State, Province, and Endorsements

Date 11-12 -, 20 07

Form No. 2028

**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**  
**As Required by the Provisions of the ASME Code Section XI**

1. Owner F.E.N.O.C.  
(NAME)Date 10/10/0776 South Main Street – Akron, OH 44308  
(ADDRESS)Sheet 1 of 22. Plant Beaver Valley Power Station  
(NAME)Unit No. 1Shippingport, PA 15077  
(ADDRESS)Work Order #200205788  
Repair/Replacement Organization P.O. No., Job No., etc.3. Work Performed By BVPS Maintenance  
(NAME)Type Code Symbol Stamp Not ApplicableShippingport, PA 15077  
(ADDRESS)Authorization No. N/AExpiration Date N/A4. Identification of System Reactor Plant Component (Q3)5. (a) Applicable Construction Code ASME VIII 1968 Edition, W'68 Addenda, N/A Code Case(b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 1989(c) Applicable Section XI Code Case(s) N/A

## 6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Channel Cover	Henry Vogt	18649	11792	ICC-E-1A	1971	Corrected	Yes

7. Description of Work Repaired Channel Cover & replaced Studs and Nuts.8. Tests Conducted: Hydrostatic\* ☐ Pneumatic\* ☐ Nominal Operating Pressure ☒ Exempt ☐Other ☐ Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F

\*Record test pressure and temperature

## FORM NIS-2 (Back)

9. Remarks Code Data Report attached. No previous NIS-2 Data Report. PA Serial Number 434589.

Applicable Manufacturer's Data Reports to be attached

Replaced 3/4" Studs: P.O. 45177853 / Ht. #Z157; Nuts: P.O. 45178058 / Ht. #X510.

## CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/ACertificate of Authorization No. N/A Expiration Date N/A

Signed



Owner or Owner's Designee, Title

Senior Specialist Date October 22, 20 07

## CERTIFICATE OF INSERVICE INSPECTION

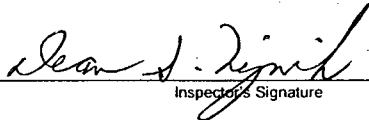
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Pennsylvania and employed by HSB CT of

Hartford, CT

have inspected the components described in this

Owner's Report during the period 4-19-06 to 10-23-07, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.



Inspector's Signature

Commissions

NB9428 ANIB PA 2384  
National Board, State, Province, and EndorsementsDate 10-23-, 20 07



# FORM 1-1 (back)

18. INSPECTION Manholes, No. \_\_\_\_\_ Size \_\_\_\_\_ Location \_\_\_\_\_  
 OPENINGS: Handholes, No. \_\_\_\_\_ Size \_\_\_\_\_ Location \_\_\_\_\_  
 Threaded, No. \_\_\_\_\_ Size \_\_\_\_\_ Location \_\_\_\_\_  
 19. SUPPORTS: Skirt \_\_\_\_\_ Lugs \_\_\_\_\_ (Number) \_\_\_\_\_ Legs \_\_\_\_\_ (Number) \_\_\_\_\_  
 Other \_\_\_\_\_ (Describe) \_\_\_\_\_ Attached \_\_\_\_\_ (Where & How)

20. REMARKS: Primary Component Cooling Heat Exchanger No. 1

Order No. BK-47 Job Order No. 21700 Item CC-EIA

\*Channel side of each tube sheet is clad with 308-L weld deposit 3/8" thick increasing tube sheet thickness to 1-7/8".

(Brief description of purpose of the vessel, as Air Tank, After Cooler, Jacketed Cooker, etc. State contents of each part.)

We certify that the statements made in this report are correct and that all details of Design, material, construction, and workmanship of this vessel conform to the ASME Code for Unfired Pressure Vessels.

Date April 26 19 72 Signed HENRY VOGT MACHINE CO. By [Signature]  
 (Manufacturer)

Certificate of Authorization Expires December 31, 1972 (#409)

## CERTIFICATE OF SHOP INSPECTION

VESSEL MADE BY Henry Vogt Machine Co., at Louisville, Kentucky

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province Nat'l. Bd. and employed by Employers Commercial Union Insurance Company

have inspected the pressure vessel described in this manufacturer's data report on April 23, 1971, and state that to the best of my knowledge and belief, the manufacturer has constructed this pressure vessel in accordance with the applicable sections of the ASME Boiler and Pressure Vessel Code.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the pressure vessel described in this manufacturer's data report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date April 26, 19 72

Inspector's Signature

Commissions N.B.-5126

Nat'l. Board of State and No. Pennsylvania WC-4130

## CERTIFICATE OF FIELD ASSEMBLY INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province \_\_\_\_\_ and employed by \_\_\_\_\_

have compared the statements in this manufacturer's data report with the described pressure vessel and state that parts referred to as data items not included in the certificate of shop inspection have been inspected by me and that to the best of my knowledge and belief the manufacturer has constructed and assembled this pressure vessel in accordance with the applicable sections of the ASME Boiler and Pressure Vessel Code. The described vessel was inspected and subjected to a hydrostatic test at \_\_\_\_\_ psi.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the pressure vessel described in this manufacturer's data report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date \_\_\_\_\_

Commissions \_\_\_\_\_

Nat'l. Board of State and No. \_\_\_\_\_

Form No. 2032

**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**  
**As Required by the Provisions of the ASME Code Section XI**

1. Owner First Energy Corp Date July 19, 2007  
(NAME)  
Shippingport, PA 15077 Sheet 1 of 1  
(ADDRESS)
2. Plant Beaver Valley Power Station Unit No. 1  
(NAME)  
Shippingport, PA 15077 Work Order #200258248 / ECP-07-0049-02  
(ADDRESS) Repair/Replacement Organization P.O. No., Job No., etc.
3. Work Performed By BVPS Construction Service Type Code Symbol Stamp N/A  
(NAME)  
Shippingport, PA 15077 Authorization No. N/A  
(ADDRESS) Expiration Date N/A
4. Identification of System Chemical & Volume Control System (Class Q2)
5. (a) Applicable Construction Code ANSI B31.1.0 1967 Edition, Summer 1971 Addenda, — Code Case  
 (b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 1989  
 (c) Applicable Section XI Code Case(s) N-491-2
6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Pipe Support	Stone & Webster	N/A	N/A	1CH-R-6A	1976	Corrected	No
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

7. Description of Work Addition of (2) 3"x3"x3/8" angles to restraint CH-R-6A per ECP-07-0049-02.

8. Tests Conducted: Hydrostatic\* ☐ Pneumatic\* ☐ Nominal Operating Pressure ☐ Exempt ☒  
 Other ☐ Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F

\*Record test pressure and temperature


## FORM NIS-2 (Back)

9. Remarks No Code Data Report available.

Applicable Manufacturer's Data Reports to be attached

## CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.


Type Code Symbol Stamp N/ACertificate of Authorization No. N/A Expiration Date N/ASigned Rob Klindworth  Date 7-23, 20 07

Owner or Owner's Designee, Title

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of PA and employed by HSB CT of HARTFORD, CT have inspected the components described in this Owner's Report during the period 4-19-06 to 8-1-07, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Dean J. Lynch  Commissions I, N, P 42384  
Inspector's Signature National Board, State, Province, and Endorsements

Date 8-1-, 20 07

Form No. 2033

**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**  
**As Required by the Provisions of the ASME Code Section XI**

1. Owner First Energy Corp Date October 16, 2007  
(NAME)  
Shippingport, PA 15077 Sheet 1 of 1  
(ADDRESS)
2. Plant Beaver Valley Power Station Unit No. 1  
(NAME)  
Shippingport, PA 15077 Work Order #200223107 / ECP-07-0049-01  
(ADDRESS) Repair/Replacement Organization P.O. No., Job No., etc.
3. Work Performed By BVPS Construction Service Type Code Symbol Stamp N/A  
(NAME)  
Shippingport, PA 15077 Authorization No. N/A  
(ADDRESS) Expiration Date N/A
4. Identification of System Safety Injection System (Class Q1)
5. (a) Applicable Construction Code ANSI B31.1.0 1967 Edition, Summer 1971 Addenda, --- Code Case  
 (b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 1989  
 (c) Applicable Section XI Code Case(s) N-491-2

## 6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Pipe Support	Stone & Webster	N/A	N/A	ISI-72-R-309	1976	Corrected	No
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

7. Description of Work
- Remove 3x3x1/2" angle from support SI-72-R-309 per ECP-07-0049-01.

8. Tests Conducted: Hydrostatic\* ☐ Pneumatic\* ☐ Nominal Operating Pressure ☐ Exempt ☒  
 Other ☐ Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F

\*Record test pressure and temperature

## FORM NIS-2 (Back)

9. Remarks No Code Data Report Available.

Applicable Manufacturer's Data Reports to be attached

## CERTIFICATE OF COMPLIANCE


I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/ACertificate of Authorization No. N/A Expiration Date N/ASigned Rob Klindworth  Date 10/16, 20 07  
Owner or Owner's Designee, Title

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of PA and employed by HSB CT of HARTFORD, CT have inspected the components described in this Owner's Report during the period 4-19-06 to 10-22-07, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Dean S. Hynick  Commissions I, N, PA 2384  
Inspector's Signature National Board, State, Province, and Endorsements

Date 10-22-, 20 07

Form No. 2034

**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**  
**As Required by the Provisions of the ASME Code Section XI**

1. Owner First Energy Corp Date September 19, 2007  
(NAME)  
Shippingport, PA 15077 Sheet 1 of 1  
(ADDRESS)
2. Plant Beaver Valley Power Station Unit No. 1  
(NAME)  
Shippingport, PA 15077 Work Order # 200258249 / ECP-07-0049-03  
(ADDRESS) Repair/Replacement Organization P.O. No., Job No., etc.
3. Work Performed By BVPS Construction Service Type Code Symbol Stamp N/A  
(NAME)  
Shippingport, PA 15077 Authorization No. N/A  
(ADDRESS) Expiration Date N/A
4. Identification of System Chemical & Volume Control System (Class Q2)
5. (a) Applicable Construction Code ANSI B31.1.0 1967 Edition, Summer 1971 Addenda, — Code Case  
 (b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 1989  
 (c) Applicable Section XI Code Case(s) N-491-2

## 6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Pipe Support	Stone & Webster	N/A	N/A	ICH-R-10	1976	Removed	No
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

7. Description of Work
- Complete removal of support CH-R-10 per ECP-07-0049-03.

8. Tests Conducted: Hydrostatic\* ☐ Pneumatic\* ☐ Nominal Operating Pressure ☐ Exempt ☒  
 Other ☐ Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F

\*Record test pressure and temperature

## FORM NIS-2 (Back)

9. Remarks No Code Data Report Available.

Applicable Manufacturer's Data Reports to be attached

## CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/ACertificate of Authorization No. N/A

Expiration Date

N/ASigned Rob Klindworth

Owner or Owner's Designee, Title

Date 9/19, 20 07

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of PA and employed by HSBCT of

HARTFORD, CT.

have inspected the components described in this

Owner's Report during the period

4-19-06

to

9-24-07, and state that to the

best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Dean S. Lynch  
Inspector's Signature

Commissions

I.N. PA 2384  
National Board, State, Province, and EndorsementsDate 9-24-, 20 07

Form No. 2035

**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**  
**As Required by the Provisions of the ASME Code Section XI**

1. Owner First Energy Corp Date June 28, 2007  
(NAME)  
Shippingport, PA 15077 Sheet 1 of 1  
(ADDRESS)

2. Plant Beaver Valley Power Station Unit No. 1  
(NAME)  
Shippingport, PA 15077 Work Order #200258250 / ECP-07-0049-04  
(ADDRESS) Repair/Replacement Organization P.O. No., Job No., etc.

3. Work Performed By BVPS Construction Service Type Code Symbol Stamp N/A  
(NAME)  
Shippingport, PA 15077 Authorization No. N/A  
(ADDRESS) Expiration Date N/A

4. Identification of System Safety Injection System (Class Q2)

5. (a) Applicable Construction Code ANSI B31.1.0 1967 Edition, Summer 1971 Addenda, --- Code Case  
 (b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 1989  
 (c) Applicable Section XI Code Case(s): N/A

6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Pipe Support	Stone & Webster	N/A	N/A	ISI-R-19	1976	Removed	No

7. Description of Work Complete removal of support SI-R-19 per ECP-07-0049-04.

8. Tests Conducted: Hydrostatic\* ☐ Pneumatic\* ☐ Nominal Operating Pressure ☐ Exempt ☒  
 Other ☐ Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F

\*Record test pressure and temperature


## FORM NIS-2 (Back)

9. Remarks No Code Data Report available.

Applicable Manufacturer's Data Reports to be attached

## CERTIFICATE OF COMPLIANCE

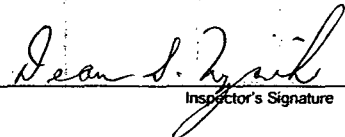
I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/ACertificate of Authorization No. N/A Expiration Date N/ASigned Rob Klindworth  Date 7/3/07, 20 07  
Owner or Owner's Designee, Title

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of PA and employed by HSB CT of HARTFORD, CT. have inspected the components described in this Owner's Report during the period 4-19-06 to 7-3-07, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

  
Inspector's Signature

Commissions PA 2384 I, N  
National Board, State, Province, and Endorsements

Date 7-3-, 20 07

Form No. 2037

**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**  
**As Required by the Provisions of the ASME Code Section XI**

1. Owner F.E.N.O.C Date 10/19/2007  
(NAME)  
76 South Main Street – Akron, OH 44308 Sheet 1 of 3  
(ADDRESS)
2. Plant Beaver Valley Power Station (BVPS) Unit No. 1  
(NAME)  
Shippingport, PA 15077 Work Order #200229928  
(ADDRESS) Repair/Replacement Organization P.O. No., Job No., etc.
3. Work Performed By BVPS Construction Service Type Code Symbol Stamp N/A  
(NAME)  
Shippingport, PA 15077 Authorization No. N/A  
(ADDRESS) Expiration Date "
4. Identification of System Safety Injection (Q1)

5. (a) Applicable Construction Code ANSI B31.1 1967 Edition, S'71 Addenda, N/A Code Case  
 (b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 1989  
 (c) Applicable Section XI Code Case(s): N-416-2

## 6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Globe Valve	Edwards Valves	47	N/A	ISI-97	1997	Removed	No
Throttle Valve	Masoncilan/Dresser	448414-1-2	N/A	ISI-97	2007	Installed	Yes
Gate Valve	Velan	061001-2	N/A	ISI-483	2007	Installed	Yes
Pipe	Energy & Process	N/A	N/A	Ht. #037046	2006	Installed	No

7. Description of Work Replaced throttle valve and installed a new isolation valve and pipe.

8. Tests Conducted: Hydrostatic\* ☐ Pneumatic\* ☐ Nominal Operating Pressure ☒ Exempt ☐  
 Other ☐ Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F

\*Record test pressure and temperature

## FORM NIS-2 (Back)

9. Remarks Code Data Report attached. Previous NIS-2 Data Report No. 954. Replacement valve  
Applicable Manufacturer's Data Reports to be attached  
1SI-97 was manufactured to ASME Sect. III 2001E-2003A, Class 2. New valve 1SI-483 was  
Manufactured to ASME Sect. III 1989E, Class 1. Both valves are installed into an ANSI B31.1  
system.

## CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date N/A

Signed



Owner or Owner's Designee, Title

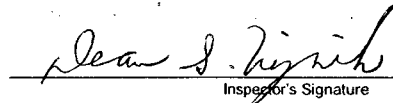
Senior Specialist Date October 24, 20 07

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Pennsylvania and employed by HSB CT of Hartford, CT

have inspected the components described in this Owner's Report during the period 4-19-06 to 10-24-07, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

  
 Inspector's Signature

Commissions

I, N, PA2384  
 National Board, State, Province, and Endorsements

Date 10-31-, 20 07

As Required by the Provisions of the ASME Code, Section III, Division 1

\*CORRECTED 11/1/07

- [illegible]

This form (E00037) may be obtained from the Order Dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300.

# FORM NPV-1 (Back - Pg. 2 of 2)

Certificate Holder's Serial No. N 448414-1-2

8. Design Conditions 2485 psi 650 °F or valve pressure class \_\_\_\_\_ (1)  
(pressure) (temperature)
9. Cold working pressure 3782.5 psi at 100°F
10. Hydrostatic test 5675 psi Disk differential test pressure \*SEE REMARKS psi
11. \*Remarks

## NC-3531.4 Exemptions to the Valve Closure Test

(b) For valves designed for nonisolation service, the primary function of which is to modulate flow, and which by their design are prevented from providing full closure, the valve closure test defined in NC-3531.2 is not required. Do to size limitation of name plate this requirement could not be identified on the name plate itself.

## CERTIFICATION OF DESIGN

Design Specification certified by FRANCIS W. GARDNER P.E. State PA Reg. no. 036614-E  
 Design Report certified by L.C. LUCKHARDT P.E. State ONTARIO Reg. no. 27575505

## CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this pump or valve conforms to the rules for construction of the ASME Code, Section III, Division:

N Certificate of Authorization No. N-1836 Expires NOVEMBER 19, 2007

Date 11/1/07 Name DRESSER INC. MASONEILAN OPERATIONS, 85 BODWELL ST. AVON, MA 02322 Signed [Signature]  
(N Certificate Holder) (authorized representative)

## CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of MA and employed by HSB CT of HARTFORD, CT

9/7/07 have inspected the pump, or valve, described in this Data Report on \_\_\_\_\_ and state that to the best of my knowledge and belief, the Certificate Holder has constructed this pump, or valve, in accordance with the ASME Code, Section III, Division 1.

By signing this certificate, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the component described in this Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 11/2/07 Signed [Signature] Commissions MA1651 ABNI  
(Authorized Nuclear Inspector) [Nat'l Bd. (incl. endorsements) and state or prov. and no.]

(1) For manually operated valves only.

DATA PACKAGE NO. 061001

FORM NPV-1 CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PUMPS OR VALVES \*  
As Required by the Provisions of the ASME Code, Section III, Division 1

Pg. 1 of 2

1. Manufactured and certified by VELAN INC. 2125 WARD AVE, MONTREAL, QUEBEC CANADA H4M1T6  
(name and address of N Certificate Holder)
2. Manufactured for FRAMATOME ANP. 3315-A OLD FOREST RD., LYNCHBURG, VA., USA, 24501  
(name and address of purchaser)
3. Location of installation NOT AVAILABLE  
(name and address)
4. Model No., Series No., or Type: GATE Drawing P1-76800-N22 Rev H CRN N/A
5. ASME Code, Section III, Division 1: 1989 NONE 1 N/A  
(edition) (addenda date) (class) (Code Case no.)
6. Pump or valve VALVE Nominal inlet size 2" Outlet size 2"  
(in.) (in.)
7. Material: Body SA-182,F316 Bonnet SA-182,F316 Disk SA-351, Bolting SA564,630H1100  
CF8M SA-194,GR8M

[illegible]

Supplemental information in form of lists, sketches, or drawings may be used provided (1) size is 8 1/2 x 11, (2) information in items 1 through 4 on this Data Report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

(12/88) This form (E00037) may be obtained from the Order Dept., ASME, 22 LAW DRIVE, Box 2300, Fairfield, NJ 07007-2300.

FRA-ANP  
OP SUP  
REG

PAGE 3 OF 22

## FORM NPV-1 (Back - Pg. 2 of 2 )

Certificate Holder's Serial No. 061001

8. Design conditions 4055 psi 100 °F or valve pressure class 1690 (1)  
 (pressure) (temperature)

9. Cold working pressure 4055 psi at 100°F

10. Hydrostatic test 6100 psi. Disk differential test pressure 4475 psi

11. Remarks: MATERIALS MEET ASME SECTION II EDITION: 1989 ADDENDA: NONE

## CERTIFICATE OF DESIGN

Design Specification certified by M. LAVIGNE P.E. State QUE Reg. no. 40052  
 Design report certified by S. ISBITSKY P.E. State QUE Reg. no. 22115

## CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this pump or valve conforms to the rules for construction of the ASME Code, Section III, Division 1.  
 N Certificate of Authorization No. N-2797-1 Expires APR 20, 2007

Date JAN 17 2006 Name VELAN INC. Signed Cathy O'Donnell  
 (N Certificate Holder) (authorized representative)

## CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of QUEBEC and employed by REGIE DU BATIMENT of QUEBEC have inspected the pump, or valve, described in this Data Report on January 25/2006, and state that to the best of my knowledge and belief, the Certificate Holder has constructed this pump, or valve, in accordance with the ASME Code, Section III, Division 1.

By signing this certificate, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the component described in this Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date Jan 25/2006 signed J.P. FACHINETTI Commissions QUEBEC  
 (Authorized Inspector) (Natl. Bd. (incl. endorsements) and state or prov. and no.)

(1) For manually operated valves only.

FRA-ANP  
OP SUP  
REG

PAGE 4 OF 22

Form No. 2038

**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**  
**As Required by the Provisions of the ASME Code Section XI**

1. Owner F.E.N.O.C Date 10/19/2007  
(NAME)  
76 South Main Street – Akron, OH 44308 Sheet 1 of 3  
(ADDRESS)
2. Plant Beaver Valley Power Station (BVPS) Unit No. 1  
(NAME)  
Shippingport, PA 15077 Work Order #200222640  
(ADDRESS) Repair/Replacement Organization P.O. No., Job No., etc.
3. Work Performed By BVPS Construction Service Type Code Symbol Stamp N/A  
(NAME)  
Shippingport, PA 15077 Authorization No. N/A  
(ADDRESS) Expiration Date "
4. Identification of System Safety Injection (Q1)
5. (a) Applicable Construction Code ANSI B31.1 1967 Edition, S71 Addenda, N/A Code Case  
 (b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 1989  
 (c) Applicable Section XI Code Case(s): N-416-2

## 6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Globe Valve	Rockwell Int'l.	N/A	N/A	ISI-98	1976	Removed	No
Throttle Valve	Masoncilan/Dresser	448414-1-4	N/A	ISI-98	2007	Installed	Yes
Gate Valve	Velan	061001-1	N/A	ISI-484	2007	Installed	Yes
Pipe	Energy & Process	N/A	N/A	Ht. #037046	2006	Installed	No

7. Description of Work
- Replaced throttle valve and installed a new isolation valve and pipe.

8. Tests Conducted: Hydrostatic\* ☐ Pneumatic\* ☐ Nominal Operating Pressure ☒ Exempt ☐  
 Other ☐ Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F

\*Record test pressure and temperature

## FORM NIS-2 (Back)

9. Remarks Code Data Report attached. Replacement valve 1SI-98 was manufactured to ASME  
Applicable Manufacturer's Data Reports to be attached  
Sect. III 2001E-2003A, Class 2. New valve 1SI-484 was manufactured to ASME Sect. III 1989E,  
Class 1. Both valves are installed into an ANSI B31.1 system.

## CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date N/A

Signed [Signature] Senior Specialist Date October 25, 20 07  
Owner or Owner's Designee, Title

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Pennsylvania and employed by HSB CT of Hartford, CT have inspected the components described in this Owner's Report during the period 4-19-06 to 10-24-07, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature] Commissions I, N, PA 2384  
Inspector's Signature National Board, State, Province, and Endorsements

Date 10-31-, 20 07

As Required by the Provisions of the ASME Code, Section III, Division 1

\*CORRECTED 11/1/07

- [illegible]

(12/88) This form (E00037) may be obtained from the Order Dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300.

# FORM NPV-1 (Back - Pg. 2 of 2)

Certificate Holder's Serial No. N 448414-1-4

8. Design Conditions 2485 (pressure) psi 650 (temperature) °F or valve pressure class \_\_\_\_\_ (1)
9. Cold working pressure 3782.5 psi at 100°F
10. Hydrostatic test 5675 psi Disk differential test pressure \*SEE REMARKS psi
11. \*Remarks

## NC-3531.4 Exemptions to the Valve Closure Test

(b) For valves designed for nonisolation service, the primary function of which is to modulate flow, and which by their design are prevented from providing full closure, the valve closure test defined in NC-3531.2 is not required. Do to size limitation of name plate this requirement could not be identified on the name plate itself.

## CERTIFICATION OF DESIGN

Design Specification certified by FRANCIS W. GARDNER P.E. State PA Reg. no. 036614-E

Design Report certified by L.C. LUCKHARDT P.E. State ONTARIO Reg. no. 27575505

## CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this pump or valve conforms to the rules for construction of the ASME Code, Section III, Division.

N Certificate of Authorization No. N-1836 Expires NOVEMBER 19, 2007

Date 11/1/07 Name DRESSER INC. MASONIELAN OPERATIONS, 85 BODWELL ST. AVON, MA 02322 Signed [Signature] (N Certificate Holder) (authorized representative)

## CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of MA and employed by HSB CT of HARTFORD, CT

9/7/07 have inspected the pump, or valve, described in this Data Report on \_\_\_\_\_ and state that to the best of my knowledge and belief, the Certificate Holder has constructed this pump, or valve, in accordance with the ASME Code, Section III, Division 1.

By signing this certificate, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the component described in this Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 11/2/07 Signed [Signature] Commissions MA1657 ABNI (Authorized Nuclear Inspector) [Nat'l Bd. (incl. endorsements) and state or prov. and no.]

(1) For manually operated valves only.

DATA PACKAGE NO. 061001

FORM NPV-1 CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PUMPS OR VALVES \*  
As Required by the Provisions of the ASME Code, Section III, Division 1

Pg. 1 of 2

1. Manufactured and certified by VELAN INC. 2125 WARD AVE, MONTREAL, QUEBEC CANADA H4M1T6  
(name and address of N Certificate Holder)
2. Manufactured for FRAMATOME ANP. 3315-A OLD FOREST RD., LYNCHBURG, VA., USA, 24501  
(name and address of purchaser)
3. Location of installation NOT AVAILABLE  
(name and address)
4. Model No., Series No., or Type: GATE Drawing P1-76800-N22 Rev H CRN N/A  
(name and address)
5. ASME Code, Section III, Division 1: 1989 NONE 1 N/A  
(edition) (addenda date) (class) (Code Case no.)
6. Pump or valve VALVE Nominal inlet size 2" Outlet size 2"  
(in.) (in.)
7. Material: Body SA-182, F316 Bonnet SA-182, F316 Disk SA-351, Bolting SA564, 630H1100  
CF8M SA-194, GR8M

[illegible]

Supplemental information in form of lists, sketches, or drawings may be used provided (1) size is 8 1/2 x 11, (2) information in items 1 through 4 on this Data Report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

(12/88) This form (E00037) may be obtained from the Order Dept., ASME, 22 LAW DRIVE, Box 2300, Fairfield, NJ 07007-2300.

FRA-ANF  
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REG

PAGE 3 OF 22

## FORM NPV-1 (Back - Pg. 2 of 2 )

Certificate Holder's Serial No. 061001

8. Design conditions 4055 psi 100 °F or valve pressure class 1690 (1)  
 (pressure) (temperature)  
 9. Cold working pressure 4055 psi at 100°F  
 10. Hydrostatic test 6100 psi. Disk differential test pressure 4475 psi  
 11. Remarks: MATERIALS MEET ASME SECTION II EDITION: 1989 ADDENDA: NONE

## CERTIFICATE OF DESIGN

Design Specification certified by M. LAVIGNE P.E. State QUE Reg. no. 40052  
 Design report certified by S. ISBITSKY P.E. State QUE Reg. no. 22115

## CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this pump or valve conforms to the rules for construction of the ASME Code, Section III, Division 1.  
 N Certificate of Authorization No. N-2797-1 Expires APR 20, 2007

Date JAN 17 2006

Name VELAN INC.

Signed

Cathy O'Donnell

(N Certificate Holder)

(authorized representative)

## CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of QUEBEC and employed by REGIE DU BATIMENT of QUEBEC have inspected the pump, or valve, described in this Data Report on January 25/2006, and state that to the best of my knowledge and belief, the Certificate Holder has constructed this pump, or valve, in accordance with the ASME Code, Section III, Division 1.

By signing this certificate, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the component described in this Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date Jan 25/2006 signed

(Authorized Inspector)

Commissions QUEBEC

J.P. FACHINETTI QC# 13813  
 REGIE DU BATIMENT DU QUEBEC  
 (Nat'l Bd. (incl. endorsements) and state or prov. and

no.)

(1) For manually operated valves only.

FRA-ANP  
OP SUP  
REG

PAGE 4 OF 22

Form No. 2039

**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**  
**As Required by the Provisions of the ASME Code Section XI**

1. Owner F.E.N.O.C Date 10/19/2007  
(NAME)  
76 South Main Street -- Akron, OH 44308 Sheet 1 of 3  
(ADDRESS)
2. Plant Beaver Valley Power Station (BVPS) Unit No. 1  
(NAME)  
Shippingport, PA 15077 Work Order #200229929  
(ADDRESS) Repair/Replacement Organization P.O. No., Job No., etc.
3. Work Performed By BVPS Construction Service Type Code Symbol Stamp N/A  
(NAME)  
Shippingport, PA 15077 Authorization No. N/A  
(ADDRESS) Expiration Date "
4. Identification of System Safety Injection (Q1)
5. (a) Applicable Construction Code ANSI B31.1 1967 Edition, S'71 Addenda, N/A Code Case  
 (b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 1989  
 (c) Applicable Section XI Code Case(s): N-416-2

## 6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Globe Valve	Rockwell Int'l.	N/A	N/A	ISI-99	1976	Removed	No
Throttle Valve	Masoneilan/Dresser	448414-1-1	N/A	ISI-99	2007	Installed	Yes
Gate Valve	Velan	061001-6	N/A	ISI-485	2007	Installed	Yes
Pipe	Energy & Process	N/A	N/A	Ht. #037046	2006	Installed	No

7. Description of Work Replaced throttle valve and installed a new isolation valve and pipe.

8. Tests Conducted: Hydrostatic\* ☐ Pneumatic\* ☐ Nominal Operating Pressure ☒ Exempt ☐  
 Other ☐ Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F

\*Record test pressure and temperature

## FORM NIS-2 (Back)

9. Remarks Code Data Report attached. Replacement valve 1SI-99 was manufactured to ASME  
Applicable Manufacturer's Data Reports to be attached  
Sect. III 2001E-2003A, Class 2. New valve 1SI-485 was manufactured to ASME Sect. III 1989E,  
Class 1. Both valves are installed into an ANSI B31.1 system.

## CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A

Expiration Date N/A

Signed [Signature] Senior Specialist Date October 25, 20 07  
Owner or Owner's Designee, Title

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Pennsylvania and employed by HSB CT of Hartford, CT have inspected the components described in this

Owner's Report during the period 4-19-06 to 10-24-07, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature]  
Inspector's Signature

Commissions

I, N, P 42384  
National Board, State, Province, and Endorsements

Date 10-31-, 20 07

As Required by the Provisions of the ASME Code, Section III, Division 1

\*CORRECTED 11/1/07

- |  |  |                        |                 |                                |
|--|--|------------------------|-----------------|--------------------------------|
| 1. Manufactured and certified by       | Dresser Inc. Masoneilan Operations 85 Bodwell St. Avon, MA 02322<br>(name and address of N Certificate Holder) |                        |                 |                                |
| 2. Manufactured for                    | First Energy P.O. Box 6100 Johnstown, PA 15907-6100<br>(name and address of Purchaser)                         |                        |                 |                                |
| 3. Location of installation            | First Energy Generation Dist. Center Beaver Valley Rte 168 Shippingport PA 15077<br>(name and address)         |                        |                 |                                |
| 4. Model No., Series No., or Type      | 20-18439   | Drawing                | 448414-1        | Rev. *F CRN N/A                |
| 5. ASME Code, Section III, Division 1: | 2001<br>(edition)  | 2003<br>(addenda date) | 2<br>(class)    | N/A<br>(Code Case no.)         |
| 6. Pump or valve                       | VALVE  | Nominal inlet size     | 2 INCH<br>(in.) | Outlet size<br>2 INCH<br>(in.) |
| 7. Material:                           |  |                        |                 |                                |
| a) Valve                               | Body   | SA 351 GR CF8M         | Bonnet          | SA 182 GR F316                 |
|  |  |                        | Disc            | SA 479 TYPE 410                |
|  |  |                        | Bolting         | SA 453 GR 660                  |
| b) Pump                                | Casting  | Cover                  | Bolting         |                                |

[illegible]

This form (E00037) may be obtained from the Order Dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300.

# FORM NPV-1 (Back - Pg. 2 of 2)

Certificate Holder's Serial No. N 448414-1-1

8. Design Conditions 2485 (pressure) psi 650 (temperature) °F or valve pressure class \_\_\_\_\_ (1)
9. Cold working pressure 3782.5 psi at 100°F
10. Hydrostatic test 5675 psi Disk differential test pressure \*SEE REMARKS psi
11. \*Remarks

## NC-3531.4 Exemptions to the Valve Closure Test

(b) For valves designed for nonisolation service, the primary function of which is to modulate flow, and which by their design are prevented from providing full closure, the valve closure test defined in NC-3531.2 is not required. Do to size limitation of name plate this requirement could not be identified on the name plate itself.

## CERTIFICATION OF DESIGN

Design Specification certified by FRANCIS W. GARDNER P.E. State PA Reg. no. 036614-E

Design Report certified by L.C. LUCKHARDT P.E. State ONTARIO Reg. no. 27575505

## CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this pump or valve conforms to the rules for construction of the ASME Code, Section III, Division.

N Certificate of Authorization No. N-1836 Expires NOVEMBER 19, 2007

Date 11/1/07 Name DRESSER INC. MASONELAN OPERATIONS, 85 BODWELL ST. AVON, MA 02322 Signed [Signature] (N Certificate Holder) (authorized representative)

## CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of MA and employed by HSB CT

of HARTFORD, CT have inspected the pump, or valve, described in this Data Report on 9/7/07 and state that to the best of my knowledge and belief, the Certificate Holder has constructed this pump, or valve, in accordance with the ASME Code, Section III, Division 1.

By signing this certificate, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the component described in this Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 11/2/07 Signed [Signature] Commissions MA1651 ABNI (Authorized Nuclear Inspector) [Nat'l Bd. (incl. endorsements) and state or prov. and no.]

(1) For manually operated valves only.

DATA PACKAGE NO. 061001

FORM NPV-1 CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PUMPS OR VALVES \*  
As Required by the Provisions of the ASME Code, Section III, Division 1

Pg. 1 of 2

1. Manufactured and certified by VELAN INC. 2125 WARD AVE, MONTREAL QUEBEC CANADA H4M1T6  
(name and address of N Certificate Holder)

2. Manufactured for FRAMATOME ANP. 3315-A OLD FOREST RD., LYNCHBURG, VA., USA, 24501  
(name and address of purchaser)

3. Location of installation NOT AVAILABLE  
(name and address)

4. Model No., Series No., or Type: GATE Drawing P1-76800-N22 Rev H CRN N/A

5. ASME Code, Section III, Division 1: 1989 NONE 1 N/A  
(edition) (addenda date) (class) (Code Case no.)

6. Pump or valve VALVE Nominal inlet size 2" Outlet size 2"  
(in.) (in.)

7. Material: Body SA-182, F316 Bonnet SA-182, F316 Disk SA-351, Bolting SA564, 630H1100  
CF8M SA-194, GR8M

[illegible]

Supplemental information in form of lists, sketches, or drawings may be used provided (1) size is 8 1/2 x 11, (2) information in items 1 through 4 on this Data Report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

(12/88) This form (E00037) may be obtained from the Order Dept., ASME, 22 LAW DRIVE, Box 2300, Fairfield, NJ 07007-2300.

FRA-ANP  
OP SUP  
REG

PAGE 3 OF 22

PAGE 4 OF 22

Form No. 2043

**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**  
**As Required by the Provisions of the ASME Code Section XI**

1. Owner First Energy Corp. Date 5/23/07  
(NAME)  
Shippingport, PA. 15077 Sheet 1 of 1  
(ADDRESS)
2. Plant Beaver Valley Power Station Unit No. 1  
(NAME)  
Shippingport, PA. 15077 ECP-07-0059-01 (200223109)  
(ADDRESS) Repair/Replacement Organization P.O. No., Job No., etc.
3. Work Performed By BVPS Construction Type Code Symbol Stamp N/A  
(NAME)  
Shippingport, PA. 15077 Authorization No. N/A  
(ADDRESS) Expiration Date N/A
4. Identification of System Recirculating Spray (Code Class 2)
5. (a) Applicable Construction Code ANSI B31.1.0 1967 Edition, Summer 1971 Addenda, --- Code Case  
 (b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 1989  
 (c) Applicable Section XI Code Case(s): N/A

## 6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Pipe Support	Stone & Webster	N/A	N/A	IRS-A-24	1976	Corrected	No

7. Description of Work Removal of diagonal braces and base plates to provide clearance for  
Expanded sump strainer

8. Tests Conducted: Hydrostatic\* ☐ Pneumatic\* ☐ Nominal Operating Pressure ☐ Exempt ☒  
 Other ☐ Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F

\*Record test pressure and temperature

## FORM NIS-2 (Back)


9. Remarks No Code data report available

Applicable Manufacturer's Data Reports to be attached

## CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

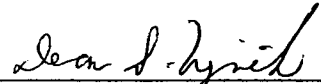
Type Code Symbol Stamp N/ACertificate of Authorization No. N/A Expiration Date N/A

Signed Willis R. Garman - Engineer  Date 9/26, 20 07  
Owner or Owner's Designee, Title

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Pennsylvania and employed by HSB CT of Hartford, Ct. have inspected the components described in this Owner's Report during the period 4-19-06 to 10-22-07, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

 Commissions I, N, P 2384  
Inspector's Signature National Board, State, Province, and Endorsements

Date 10-22-, 20 07

Form No. 2044

**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**  
**As Required by the Provisions of the ASME Code Section XI**

1. Owner First Energy Corp. Date 5/23/07  
(NAME)  
Shippingport, PA. 15077 Sheet 1 of 1  
(ADDRESS)
2. Plant Beaver Valley Power Station Unit No. 1  
(NAME)  
Shippingport, PA. 15077 ECP-07-0059-02 (200252864)  
(ADDRESS) Repair/Replacement Organization P.O. No., Job No., etc.
3. Work Performed By BVPS Construction Type Code Symbol Stamp N/A  
(NAME)  
Shippingport, PA. 15077 Authorization No. N/A  
(ADDRESS) Expiration Date N/A
4. Identification of System Residual Heat Removal (Code Class 2)
5. (a) Applicable Construction Code ANSI B31.1.0 1967 Edition, Summer 1971 Addenda, --- Code Case  
 (b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 1989  
 (c) Applicable Section XI Code Case(s): N-491-2

## 6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Pipe Support	Stone & Webster	N/A	N/A	1RH-A-1	1976	Corrected	No

7. Description of Work Removal of diagonal brace and base plate to provide clearance for  
Expanded sump strainer

8. Tests Conducted: Hydrostatic\* ☐ Pneumatic\* ☐ Nominal Operating Pressure ☐ Exempt ☒  
 Other ☐ Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F

\*Record test pressure and temperature

## FORM NIS-2 (Back)


9. Remarks No Code data report available

Applicable Manufacturer's Data Reports to be attached

## CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/ACertificate of Authorization No. N/A Expiration Date N/A


Signed Willis R. Garman - Engineer  Date 9/26, 20 07  
Owner or Owner's Designee, Title

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Pennsylvania and employed by HSB CT of Hartford, Ct. have inspected the components described in this

Owner's Report during the period 4-18-06 to 10-22-07, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

 \_\_\_\_\_ Commissions I, N, PA 2384  
Inspector's Signature National Board, State, Province, and Endorsements

Date 10-22-, 20 07

Form No. 2051

**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**  
**As Required by the Provisions of the ASME Code Section XI**

1. Owner F.E.N.O.C. Date 10/8/2007  
(NAME)  
76 South Main Street – Akron, OH 44308 Sheet 1 of 1  
(ADDRESS)

2. Plant Beaver Valley Power Station Unit No. 1  
(NAME)  
Shippingport, PA 15077 Work Order # 200262528  
(ADDRESS) Repair/Replacement Organization P.O. No., Job No., etc.

3. Work Performed By BVPS Maintenance Type Code Symbol Stamp Not Applicable  
(NAME)  
Shippingport, PA 15077 Authorization No. N/A  
(ADDRESS) Expiration Date N/A

4. Identification of System Diesel Generator Fuel Oil (Q3)

5. (a) Applicable Construction Code ANSI B16.5 1968 Edition, N/A Addenda, N/A Code Case  
 (b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 1989  
 (c) Applicable Section XI Code Case(s) N/A

## 6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Check Valve	Crane	N/A	N/A	1FO-36	1976	Corrected	No

7. Description of Work Replaced body to bonnet capscrews

8. Tests Conducted: Hydrostatic\* ☐ Pneumatic\* ☐ Nominal Operating Pressure ☐ Exempt ☒  
 Other ☐ Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F

\*Record test pressure and temperature

## FORM NIS-2 (Back)

9. Remarks No Code Data Report available. Replaced 3/4" Capscrews: PO. 45237967 / Ht. #OV93.

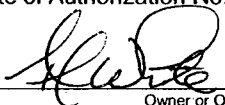
Applicable Manufacturer's Data Reports to be attached

## CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/ACertificate of Authorization No. N/AExpiration Date N/A

Signed



Owner or Owner's Designee, Title

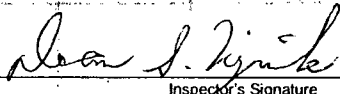
Senior Specialist Date November 13, 20 07

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Pennsylvania and employed by HSB CT of Hartford, CT have inspected the components described in this Owner's Report during the period 4-19-06 to

10-24-07 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.



Inspector's Signature

Commissions

I, N, PA 2384

National Board, State, Province, and Endorsements

Date

11-14-

, 20

07

Form No. 2055

**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**  
**As Required by the Provisions of the ASME Code Section XI**

1. Owner F.E.N.O.C. Date 10/30/2007  
(NAME)  
76 South Main Street – Akron, OH 44308 Sheet 1 of 1  
(ADDRESS)

2. Plant Beaver Valley Power Station Unit No. 1  
(NAME)  
Shippingport, PA 15077 Work Order # 200228102  
(ADDRESS) Repair/Replacement Organization P.O. No., Job No., etc.

3. Work Performed By BVPS Construction Type Code Symbol Stamp Not Applicable  
(NAME)  
Shippingport, PA 15077 Authorization No. N/A  
(ADDRESS) Expiration Date N/A

4. Identification of System River Water (Q3)

5. (a) Applicable Construction Code ANSI B31.1 1967 Edition, S'71 Addenda, N/A Code Case  
 (b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 1989  
 (c) Applicable Section XI Code Case(s): N-416-2

6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Pipe	Stone & Webster	N/A	N/A	24"-WR-20-151-Q3	1976	Corrected	No
Pipe	Energy & Process Corp	N/A	N/A	HT# RY5529	2003	Installed	No

7. Description of Work Replaced section of pipe.

8. Tests Conducted: Hydrostatic\* ☐ Pneumatic\* ☐ Nominal Operating Pressure ☒ Exempt ☐  
 Other ☐ Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F

\*Record test pressure and temperature

## FORM NIS-2 (Back)

9. Remarks No Code Data Report available.

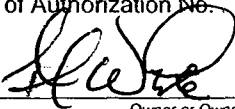
Applicable Manufacturer's Data Reports to be attached

## CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/ACertificate of Authorization No. N/AExpiration Date N/A

Signed



Owner or Owner's Designee, Title

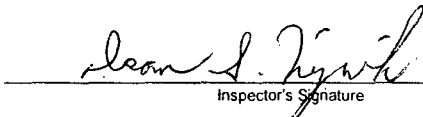
Senior Specialist Date October 31, 20 07

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Pennsylvania and employed by HSB CT of Hartford, CT have inspected the components described in this Owner's Report during the period 4-19-06 to

10-24-07 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.



Inspector's Signature

Commissions

I, N, PA 2384

National Board, State, Province, and Endorsements

Date 11-14-, 20 07

Form No. 2056

**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**  
**As Required by the Provisions of the ASME Code Section XI**

1. Owner F.E.N.O.C. Date 10/16/2007  
(NAME)
- 76 South Main Street – Akron, OH 44308 Sheet 1 of 1  
(ADDRESS)
2. Plant Beaver Valley Power Station Unit No. 1  
(NAME)
- Shippingport, PA 15077 Work Order #200031462  
(ADDRESS) Repair/Replacement Organization P.O. No., Job No., etc.
3. Work Performed By BVPS Valve Team Type Code Symbol Stamp Not Applicable  
(NAME)
- Shippingport, PA 15077 Authorization No. N/A  
(ADDRESS)
- Expiration Date N/A
4. Identification of System Quench Spray (Q2)
5. (a) Applicable Construction Code ANSI B16.5 1968 Edition, N/A Addenda, N/A Code Case  
 (b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 1989  
 (c) Applicable Section XI Code Case(s) N/A

## 6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Gate Valve	Pacific Valve	158076	N/A	MOV-1QS-100A	1976	Corrected	No

7. Description of Work Replaced body to bonnet studs and nuts.

8. Tests Conducted: Hydrostatic\* ☐ Pneumatic\* ☐ Nominal Operating Pressure ☐ Exempt ☒  
 Other ☐ Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F

\*Record test pressure and temperature

## FORM NIS-2 (Back)

9. Remarks No Code Data Report available. Replaced body/bonnet 3/4" Studs: P.O. 45189502 / Ht. #Applicable Manufacturer's Data Reports to be attached196C, P.O. 45187878 / Ht. #153C; Nuts: P.O. 45204172 / Ht. #443C.

## CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/ACertificate of Authorization No. N/A Expiration Date N/ASigned [Signature] Senior Specialist Date November 13, 20 07  
Owner or Owner's Designee, Title

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Pennsylvania and employed by HSB CT of Hartford, CT have inspected the components described in this Owner's Report during the period 4-19-06 to 10-24-07, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature] Commissions I, N, PA 2384  
Inspector's Signature National Board, State, Province, and Endorsements

Date 11-14-, 20 07

Form No. 2057

**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**  
**As Required by the Provisions of the ASME Code Section XI**

1. Owner First Energy Corp Date 10/22/07  
(NAME)  
76 S. Main St. Akron, Ohio 44308 Sheet 1 of 1  
(ADDRESS)
2. Plant Beaver Valley Power Station Unit No. 1  
(NAME)  
Shippingport, Pa. 15077 ECP 03-0295-10 (200205616)  
(ADDRESS) Repair/Replacement Organization P.O. No., Job No., etc.
3. Work Performed By BVPS Refueling Type Code Symbol Stamp N/A  
(NAME)  
Shippingport, Pa. 15007 Authorization No. N/A  
(ADDRESS) Expiration Date N/A
4. Identification of System Reactor Coolant (Q1)
5. (a) Applicable Construction Code AISC 1963 Edition, 6 Addenda, N/A Code Case  
 (b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 1989  
 (c) Applicable Section XI Code Case(s) N/A

## 6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
CRDM Seismic Tie Rods	Westinghouse	N/A	N/A	IRC-R-1	1986	Corrected	No

7. Description of Work Clevises and connecting pins on each end of tie rod (6 tie rods total) were replaced.

8. Tests Conducted: Hydrostatic\* ☐ Pneumatic\* ☐ Nominal Operating Pressure ☐ Exempt ☒  
 Other ☐ Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F

\*Record test pressure and temperature

## FORM NIS-2 (Back)

9. Remarks No Code Data Report available. Only tie rod end clevises and associated pins were  
Applicable Manufacturer's Data Reports to be attached  
replaced. The tie rod/tumbuckle between the clevis ends was reused.

## CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date N/A

Signed J. Gazdacko J. Gazdacko Date 10/23, 2007  
Owner or Owner's Designee, Title

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Pennsylvania and employed by HSB CT of Hartford, CT have inspected the components described in this Owner's Report during the period 4-19-06 to 10-24-07, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Dean S. Zwick Commissions I, N, PA 2384  
Inspector's Signature National Board, State, Province, and Endorsements

Date 10-24-, 20 07

Form No. 2059

**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**  
**As Required by the Provisions of the ASME Code Section XI**

1. Owner F.E.N.O.C Date 09/24/2007  
(NAME)
- 76 South Main Street – Akron, OH 44308 Sheet 1 of 1  
(ADDRESS)
2. Plant Beaver Valley Power Station (BVPS) Unit No. 1  
(NAME)
- Shippingport, PA 15077 ECP 07-0145-01 (200223106)  
(ADDRESS) Repair/Replacement Organization P.O. No., Job No., etc.
3. Work Performed By BVPS Construction Service Type Code Symbol Stamp N/A  
(NAME)
- Shippingport, PA 15077 Authorization No. N/A  
(ADDRESS)
- Expiration Date "
4. Identification of System Quench Spray (Q3)
5. (a) Applicable Construction Code ANSI B31.1 1967 Edition, S'71 Addenda, N/A Code Case  
 (b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 1989  
 (c) Applicable Section XI Code Case(s): N/A

## 6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Pipe	Stone & Webster	N/A	N/A	QS-72	1976	Corrected	No
Plug	Nova Machine	N/A	N/A	Ht. #718682	2000	Installed	No

7. Description of Work Installed a 3/8" pipe plug and seal welded.

8. Tests Conducted: Hydrostatic\* ☐ Pneumatic\* ☐ Nominal Operating Pressure ☐ Exempt ☒  
 Other ☐ Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F

\*Record test pressure and temperature

## FORM NIS-2 (Back)

9. Remarks No Code Data Report available.

Applicable Manufacturer's Data Reports to be attached

## CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/ACertificate of Authorization No. N/AExpiration Date N/A

Signed



Owner or Owner's Designee, Title

Staff Nuclear Engineer Date October 31, 20 07

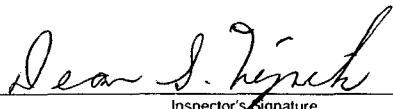
## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Pennsylvania and employed by HSB CT of

Hartford, CT have inspected the components described in this

Owner's Report during the period 4-19-06 to 10-24-07, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.



Inspector's Signature

Commissions

I, N, PA 2384

National Board, State, Province, and Endorsements

Date 10-31-, 20 07

Form No. 2060

**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**  
**As Required by the Provisions of the ASME Code Section XI**

1. Owner F.E.N.O.C Date 09/24/2007  
(NAME)  
76 South Main Street – Akron, OH 44308 Sheet 1 of 1  
(ADDRESS)
2. Plant Beaver Valley Power Station (BVPS) Unit No. 1  
(NAME)  
Shippingport, PA 15077 ECP 07-0145-01 (200261487)  
(ADDRESS) Repair/Replacement Organization P.O. No., Job No., etc.
3. Work Performed By BVPS Construction Service Type Code Symbol Stamp N/A  
(NAME)  
Shippingport, PA 15077 Authorization No. N/A  
(ADDRESS) Expiration Date "
4. Identification of System Quench Spray (Q3)
5. (a) Applicable Construction Code ANSI B31.1 1967 Edition, S'71 Addenda, N/A Code Case  
 (b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 1989  
 (c) Applicable Section XI Code Case(s): N/A

## 6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed.	ASME Code Stamped (Yes or No)
Pipe	Stone & Webster	N/A	N/A	QS-73	1976	Corrected	No
Plug	Nova Machine	N/A	N/A	Ht. #718682	2000	Installed	No

7. Description of Work Installed a 3/8" pipe plug and seal welded.

8. Tests Conducted: Hydrostatic\* ☐ Pneumatic\* ☐ Nominal Operating Pressure ☐ Exempt ☒  
 Other ☐ Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F

\*Record test pressure and temperature

## FORM NIS-2 (Back)

9. Remarks No Code Data Report available.

Applicable Manufacturer's Data Reports to be attached

## CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/ACertificate of Authorization No. N/AExpiration Date N/A

Signed


Staff Nuclear Engineer Date October 31, 20 07

Owner or Owner's Designee, Title

## CERTIFICATE OF INSERVICE INSPECTION

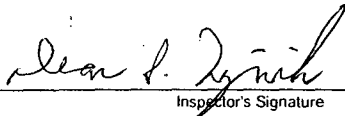
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Pennsylvania and employed by HSB CT of

Hartford, CT

have inspected the components described in this

Owner's Report during the period 4-19-06 to 10-24-07, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.



Inspector's Signature

Commissions

I, N, PA 2384

National Board, State, Province, and Endorsements

Date 10-31-, 20 07

Form No. 2061

**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**  
**As Required by the Provisions of the ASME Code Section XI**

1. Owner F.E.N.O.C Date 12/17/2007  
(NAME)  
76 South Main Street – Akron, OH 44308 Sheet 1 of 1  
(ADDRESS)
2. Plant Beaver Valley Power Station (BVPS) Unit No. 1  
(NAME)  
Shippingport, PA 15077 Work Orders #200212174, 200266335  
(ADDRESS) Repair/Replacement Organization P.O. No., Job No., etc.
3. Work Performed By BVPS Maintenance Type Code Symbol Stamp N/A  
(NAME)  
Shippingport, PA 15077 Authorization No. N/A  
(ADDRESS) Expiration Date "
4. Identification of System Chemical and Volume Control (Q2)
5. (a) Applicable Construction Code ANSI B16.5 Edition, 1968 Addenda, N/A Code Case  
 (b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 1989  
 (c) Applicable Section XI Code Case(s):

## 6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Check Valve	Velan	N/A	N/A	1CH-22	1976	Corrected	No
Disc	Velan	7722	N/A	Ht. #G2086	2003	Installed	No

7. Description of Work Replaced valve disc and cover studs/nuts.

8. Tests Conducted: Hydrostatic\* ☐ Pneumatic\* ☐ Nominal Operating Pressure ☐ Exempt ☒  
 Other ☐ Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F

\*Record test pressure and temperature

## FORM NIS-2 (Back)

9. Remarks No Code Data Report available. Replaced 3/4" cover Nuts: P.O. 45170756 / Ht. #X326,  
Applicable Manufacturer's Data Reports to be attached  
Studs: P.O. 47103695 / Ht. #X427.

## CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date N/A

Signed [Signature] Senior Specialist Date January 04, 20 08  
Owner or Owner's Designee, Title

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Pennsylvania and employed by HSB CT of Hartford, CT have inspected the components described in this Owner's Report during the period 4-19-06 to 10-24-07, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature] Commissions I.N. PA 2384  
Inspector's Signature National Board, State, Province, and Endorsements

Date 1-7-, 20 08

Form No. 2064

**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**  
**As Required by the Provisions of the ASME Code Section XI**

1. Owner First Energy Corp. Date 5/23/07  
(NAME)  
Shippingport, PA. 15077 Sheet 1 of 1  
(ADDRESS)
2. Plant Beaver Valley Power Station Unit No. 1  
(NAME)  
Shippingport, PA. 15077 ECP-07-0059-03 (200279751)  
(ADDRESS) Repair/Replacement Organization P.O. No., Job No., etc.
3. Work Performed By BVPS Construction Type Code Symbol Stamp N/A  
(NAME)  
Shippingport, PA. 15077 Authorization No. N/A  
(ADDRESS) Expiration Date N/A
4. Identification of System Safety Injection (Code Class Q2)
5. (a) Applicable Construction Code ANSI B31.1.0 1967 Edition, Summer 1971 Addenda, --- Code Case  
 (b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 1989  
 (c) Applicable Section XI Code Case(s): N-491-2
6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer's Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Pipe Support	Stone & Webster	N/A	N/A	ISI-110-R-19	1976	Corrected	No

7. Description of Work Removal of diagonal brace and base plate to provide clearance for  
Expanded sump strainer

8. Tests Conducted: Hydrostatic\* ☐ Pneumatic\* ☐ Nominal Operating Pressure ☐ Exempt ☒  
 Other ☐ Pressure          psi Test Temp.          °F

\*Record test pressure and temperature

## FORM NIS-2 (Back)

9. Remarks No Code data report available

Applicable Manufacturer's Data Reports to be attached

## CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/ACertificate of Authorization No. N/AExpiration Date N/ASigned Willis R. Garman - Engineer

Owner or Owner's Designee, Title

Date 9/26, 20 07

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Pennsylvania and employed by HSB CT of Hartford, Ct. have inspected the components described in this

Owner's Report during the period 4-19-06 to 10-22-07, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Dean J. Smith  
Inspector's Signature

Commissions

I, N, PA 2384  
National Board, State, Province, and Endorsements

Date 10-22-, 20 07

Form No. 2065

**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**  
**As Required by the Provisions of the ASME Code Section XI**

1. Owner F.E.N.O.C. Date 10/15/2007  
(NAME)  
76 South Main Street – Akron, OH 44308 Sheet 1 of 1  
(ADDRESS)
2. Plant Beaver Valley Power Station Unit No. 1  
(NAME)  
Shippingport, PA 15077 Work Order # 200283320  
(ADDRESS) Repair/Replacement Organization P.O. No., Job No., etc.
3. Work Performed By BVPS Maintenance Type Code Symbol Stamp Not Applicable  
(NAME)  
Shippingport, PA 15077 Authorization No. N/A  
(ADDRESS) Expiration Date N/A
4. Identification of System Residual Heat Removal (Class C)
5. (a) Applicable Construction Code ASME Section III 1968 Edition, N/A Addenda, N/A Code Case  
 (b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 1989  
 (c) Applicable Section XI Code Case(s) N/A

## 6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Heat Exchanger	Joseph Oat	1832-1	368	1RH-E-1A	1969	Corrected	Yes

7. Description of Work
- Replaced one flange stud and two nuts.

8. Tests Conducted: Hydrostatic\* ☐ Pneumatic\* ☐ Nominal Operating Pressure ☐ Exempt ☒  
 Other ☐ Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F

\*Record test pressure and temperature

## FORM NIS-2 (Back)

9. Remarks No Code Data Reports available. Previous NIS-2 Report: 1581, 1260, and 414. Replaced  
Applicable Manufacturer's Data Reports to be attached  
1-3/8" Nuts: PO 45185711 / Ht. #R756; and Stud: P.O. 45189502 / Ht. #S663.

## CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date N/A

Signed [Signature] Senior Specialist Date November 13, 2007  
Owner or Owner's Designee, Title

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Pennsylvania and employed by HSB CT of Hartford, CT have inspected the components described in this Owner's Report during the period 4-18-06 to

10-24-07 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature] Commissions NB 9428 A NIB PA 2384  
Inspector's Signature National Board, State, Province, and Endorsements

Date 11-14-, 20 07

Form No. 2067

**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**  
**As Required by the Provisions of the ASME Code Section XI**

1. Owner First Energy Corp. Date 10/1/07  
(NAME)  
Shippingport, PA. 15077 Sheet 1 of 1  
(ADDRESS)

2. Plant Beaver Valley Power Station Unit No. 1  
(NAME)  
Shippingport, PA. 15077 ECP-07-0149-01 (200261911)  
(ADDRESS) Repair/Replacement Organization P.O. No., Job No., etc.

3. Work Performed By BVPS Construction Type Code Symbol Stamp N/A  
(NAME)  
Shippingport, PA. 15077 Authorization No. N/A  
(ADDRESS) Expiration Date N/A

4. Identification of System Reactor Coolant Pressurizer Safety Valve Piping (Code Class 1)

5. (a) Applicable Construction Code ANSI B31.1.0 1967 Edition, Summer 1971 Addenda, --- Code Case

(b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 1989

(c) Applicable Section XI Code Case(s): N/A

6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Pipe Support	Stone & Webster	N/A	N/A	IRC-350-H-36	1981	Corrected	No

7. Description of Work Add plates that are welded to the pipe flange and the support to restrict  
movement of the pipe when safety valve is removed.

8. Tests Conducted: Hydrostatic\* ☐ Pneumatic\* ☐ Nominal Operating Pressure ☐ Exempt ☒  
 Other ☐ Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F

\*Record test pressure and temperature

## FORM NIS-2 (Back)

9. Remarks No Code data report available

Applicable Manufacturer's Data Reports to be attached

## CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date N/A

Signed Willis R. Garman - Engineer Willis R. Garman Date 10/1, 20 07  
Owner or Owner's Designee, Title

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Pennsylvania and employed by HSB CT of Hartford, CT. have inspected the components described in this Owner's Report during the period 4-18-06 to 10-18-07, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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Dean S. Lynch Commissions I.N. PA 2384  
Inspector's Signature National Board, State, Province, and Endorsements

Date 10-18-, 20 07

Form No. 2068

**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**  
**As Required by the Provisions of the ASME Code Section XI**

1. Owner First Energy Corp. Date 10/1/07  
(NAME)  
Shippingport, PA. 15077 Sheet 1 of 1  
(ADDRESS)

2. Plant Beaver Valley Power Station Unit No. 1  
(NAME)  
Shippingport, PA. 15077 ECP-07-0149-02 (200261912)  
(ADDRESS) Repair/Replacement Organization P.O. No., Job No., etc.

3. Work Performed By BVPS Construction Type Code Symbol Stamp N/A  
(NAME)  
Shippingport, PA. 15077 Authorization No. N/A  
(ADDRESS) Expiration Date N/A

4. Identification of System Reactor Coolant Pressurizer Safety Valve Piping (Code Class 1)

5. (a) Applicable Construction Code ANSI B31.1.0 1967 Edition, Summer 1971 Addenda, -- Code Case

(b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 1989

(c) Applicable Section XI Code Case(s): N/A

6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Pipe Support	Stone & Webster	N/A	N/A	IRC-350-H-38	1981	Corrected	No

7. Description of Work Add plates that are welded to the pipe flange and the support to restrict  
movement of the pipe when safety valve is removed.

8. Tests Conducted: Hydrostatic\* ☐ Pneumatic\* ☐ Nominal Operating Pressure ☐ Exempt ☒  
 Other ☐ Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F

\*Record test pressure and temperature


## FORM NIS-2 (Back)

9. Remarks No Code data report available

Applicable Manufacturer's Data Reports to be attached

## CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/ACertificate of Authorization No. N/A Expiration Date N/ASigned Willis R. Garman - Engineer  Date 10/1, 20 07  
Owner or Owner's Designee, Title

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Pennsylvania and employed by HSB CT of Hartford, CT have inspected the components described in this Owner's Report during the period 4-19-06 to 10-18-07, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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Dean S. Lynch Commissions I, N, PA2384  
Inspector's Signature National Board, State, Province, and Endorsements

Date 10-18-, 20 07

Form No. 2069

**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**  
**As Required by the Provisions of the ASME Code Section XI**

1. Owner First Energy Corp. Date 10/1/07  
(NAME)  
Shippingport, PA. 15077 Sheet 1 of 1  
(ADDRESS)

2. Plant Beaver Valley Power Station Unit No. 1  
(NAME)  
Shippingport, PA. 15077 ECP-07-0149-03 (200261913)  
(ADDRESS) Repair/Replacement Organization P.O. No., Job No., etc.

3. Work Performed By BVPS Construction Type Code Symbol Stamp N/A  
(NAME)  
Shippingport, PA. 15077 Authorization No. N/A  
(ADDRESS) Expiration Date N/A

4. Identification of System Reactor Coolant Pressurizer Safety Valve Piping (Code Class 1)

5. (a) Applicable Construction Code ANSI B31.1.0 1967 Edition, Summer 1971 Addenda, --- Code Case

(b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 1989

(c) Applicable Section XI Code Case(s): N/A

6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Pipe Support	Stone & Webster	N/A	N/A	IRC-350-H-40	1981	Corrected	No

7. Description of Work Add plates that are welded to the pipe flange and the support to restrict  
movement of the pipe when safety valve is removed.

8. Tests Conducted: Hydrostatic\* ☐ Pneumatic\* ☐ Nominal Operating Pressure ☐ Exempt ☒  
 Other ☐ Pressure            psi Test Temp.            °F

\*Record test pressure and temperature

## FORM NIS-2 (Back)

9. Remarks No Code data report available

Applicable Manufacturer's Data Reports to be attached

## CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/ACertificate of Authorization No. N/A Expiration Date N/A

Signed Willis R. Garman - Engineer Willis R. Garman Date 10/1, 20 07  
Owner or Owner's Designee, Title

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Pennsylvania and employed by HSB CT of Hartford, CT. have inspected the components described in this Owner's Report during the period 4-19-06 to 10-18-07, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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Dean S. Hyatt Commissions I, N, PA 2384  
Inspector's Signature National Board, State, Province, and Endorsements

Date 10-18-, 20 07

Form No. 2070

**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**  
**As Required by the Provisions of the ASME Code Section XI**

1. Owner F.E.N.O.C Date 11-07-2007  
(NAME)  
76 South Main Street – Akron, OH 44308 Sheet 1 of 2  
(ADDRESS)

2. Plant Beaver Valley Power Station (BVPS) Unit No. 1  
(NAME)  
Shippingport, PA 15077 Work Order #200205203  
(ADDRESS) Repair/Replacement Organization P.O. No., Job No., etc.

3. Work Performed By BVPS Valve Team Type Code Symbol Stamp N/A  
(NAME)  
Shippingport, PA 15077 Authorization No. N/A  
(ADDRESS) Expiration Date "

4. Identification of System Steam Generator Blow Down (Q2)

5. (a) Applicable Construction Code Section III 1980 Edition, S'80 Addenda, N/A Code Case

(b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 1989

(c) Applicable Section XI Code Case(s): N/A

6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Gate Valve	Borg-Warner	75595	N/A	TV-IBD-101CI	1982	Corrected	Yes
Bonnet	Flowserve	87987-1	N/A	Ht. #87987	2006	Installed	Yes

7. Description of Work Replaced valve bonnet and body/bonnet studs & nuts.

8. Tests Conducted: Hydrostatic\* ☐ Pneumatic\* ☐ Nominal Operating Pressure ☒ Exempt ☐  
 Other ☐ Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F

\*Record test pressure and temperature

## FORM NIS-2 (Back)

9. Remarks Code Data Report attached. Replaced 5/16" Studs: P.O. 45138921 / Ht. #P441: Nuts:  
Applicable Manufacturer's Data Reports to be attached  
P.O. 47075835 / Ht. #P728. Valve is ASME Section III but is installed into an ANSI B31.1 piping  
system.

## CERTIFICATE OF COMPLIANCE

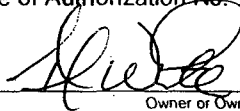
I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A

Expiration Date N/A

Signed



Owner or Owner's Designee, Title

Senior Specialist Date November 08, 20 07

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Pennsylvania and employed by HSB CT of Hartford, CT. have inspected the components described in this

Owner's Report during the period 4-19-06 to 10-24-07, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.



Inspector's Signature

Commissions

I, N, PA2384

National Board, State, Province, and Endorsements

Date 11-12-, 20 07

**FORM N-2 CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL  
NUCLEAR PARTS AND APPURTENANCES\***

**As Required by the Provisions of the ASME Code, Section III  
Not to Exceed One Day's Production**

Pg. 1 of 2

1. Manufactured and certified by <u>Flowserve Corporation/ 1900 South Saunders Street, Raleigh NC 27603</u> <small>(Name and Address of NPT Certificate Holder)</small>				
2. Manufactured for <u>First Energy Corp / PO Box 6100 Johnstown, PA 15907-6100</u> <small>(Name and Address of Purchaser)</small>				
3. Location of Installation <u>First Energy Corp/Beaver Valley Nuclear Power Plant/ Route 168 Shippingport, PA 15077</u> <small>(Name and Address)</small>				
4. Type:	<u>434HAB6-001 Rev E</u> <small>(drawing no.)</small>	<u>ASME SA105</u> <small>(mat'l. spec. no.)</small>	<u>N/A</u> <small>(tensile strength)</small>	<u>N/A</u> <small>(CRN)</small>
				<u>2006</u> <small>(year built)</small>
5. ASME Code, Section III, Division 1:	<u>1980</u> <small>(edition)</small>	<u>Summer, 1980</u> <small>(addenda date)</small>	<u>2</u> <small>(class)</small>	<u>N/A</u> <small>(Code Case no.)</small>
6. Fabricated in accordance with Const. Spec. (Div. 2 only)	<u>N/A</u> <small>(no.)</small>	<u>Revision</u>	<u>N/A</u>	Date <u>N/A</u>
7. Remarks: <u>Bonnet for a 3" 600# Globe Valve</u>				
S.O. 35877				

8. Nom. Thickness (in.)	<u>N/A</u>	Min. design thickness (in.)	<u>PER#4</u>	Dia. ID (ft & in.)	<u>N/A</u>	Length overall (ft & in.)	<u>N/A</u>
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9. When applicable, Certificate Holders' Data Reports are attached for each item of this report:

	Part or Appurtenance Serial Number	National Board No. In Numerical Order		Part or Appurtenance Serial Number	National Board No. In Numerical Order
(1)	87987-1	N/A	(26)		
(2)			(27)		
(3)			(28)		
(4)			(29)		
(5)			(30)		
(6)			(31)		
(7)			(32)		
(8)			(33)		
(9)			(34)		
(10)			(35)		
(11)			(36)		
(12)			(37)		
(13)			(38)		
(14)			(39)		
(15)			(40)		
(16)			(41)		
(17)			(42)		
(18)			(43)		
(19)			(44)		
(20)			(45)		
(21)			(46)		
(22)			(47)		
(23)			(48)		
(24)			(49)		
(25)			(50)		

10. Design pressure	<u>1480</u>	psi.	Temp.	<u>100</u>	°F.	Hydro. Test pressure	<u>N/A</u>	At temp. °F
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\*Supplemental information in form of lists, sketches or drawings may be used provided (1) size is 8-1/2" x 11", (2) information in items 2 and 3 on this Data Report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

## FORM N-2 (Back-Pg. 2 of 2)

Certificate Holder's Serial Nos. 87987-1

## CERTIFICATION OF DESIGN

Design specification certified by W. L RAMSDEN P.E. State PA Reg. no. 28975

Design Report \* certified by \_\_\_\_\_ P.E. State \_\_\_\_\_ Reg. no. \_\_\_\_\_

## CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this (these) PARTS  
 Conforms to the rules of construction of the ASME Code, Section III, Division 1.

NPT Certificate of Authorization  
No.N1563

Expires

11/26/2009

Date 12/28/06 Name Flowserve Corporation Signed [Signature]  
(NPT Certificate Holder) (authorized representative)

## CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of North Carolina and employed by HSB CT of Hartford, Connecticut have inspected these items described in this Data Report on 12/28/06, and state that, to the best of my knowledge and belief, the Certificate Holder has fabricated these parts or appurtenances in accordance with the ASME Code, Section III, Division 1. Each part listed has been authorized for stamping on the date shown above.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the equipment described in this Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or loss of any kind arising from or connected with this inspection.

Date 12/28/06 Signed [Signature] Commissions NC#1421  
(Authorized Inspector) (Nat'l Bd. (incl. Endorsements) and state, prov. and no.)

Form No. 2071

**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**  
**As Required by the Provisions of the ASME Code Section XI**

1. Owner F.E.N.O.C Date 10-29-2007  
(NAME)  
76 South Main Street – Akron, OH 44308 Sheet 1 of 1  
(ADDRESS)
2. Plant Beaver Valley Power Station (BVPS) Unit No. 1  
(NAME)  
Shippingport, PA 15077 Work Order #200221342  
(ADDRESS) Repair/Replacement Organization P.O. No., Job No., etc.
3. Work Performed By BVPS Valve Team Type Code Symbol Stamp N/A  
(NAME)  
Shippingport, PA 15077 Authorization No. N/A  
(ADDRESS) Expiration Date "
4. Identification of System Steam Generator Blow Down (Q2)
5. (a) Applicable Construction Code Section III 1980 Edition, S'80 Addenda, N/A Code Case  
 (b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 1989  
 (c) Applicable Section XI Code Case(s): N/A

## 6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Gate Valve	Borg-Warner	75598	N/A	TV-1BD-101C2	1982	Corrected	Yes

7. Description of Work Replaced body/bonnet studs & nuts.

8. Tests Conducted: Hydrostatic\* ☐ Pneumatic\* ☐ Nominal Operating Pressure ☐ Exempt ☒  
 Other ☐ Pressure          psi Test Temp.          °F

\*Record test pressure and temperature

## FORM NIS-2 (Back)

9. Remarks No Code Data report available. Previous NIS-2 Data Report No: 1427. Replaced 5/16"  
Applicable Manufacturer's Data Reports to be attached  
Studs: P.O. 45138921 / Ht. #P441 Nuts: P.O. 47075835 / Ht. #P728. Valve is ASME Section III but  
is installed into an ANSI B31.1 piping system.

## CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date N/A

Signed [Signature] Senior Specialist Date November 08, 20 07  
Owner or Owner's Designee, Title

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Pennsylvania and employed by HSB CT of Hartford, CT have inspected the components described in this Owner's Report during the period 4-19-06 to 10-24-07, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature] Commissions I, N, PA 2384  
Inspector's Signature National Board, State, Province, and Endorsements

Date 11-12-, 20 07

Form No. 2072

**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**  
**As Required by the Provisions of the ASME Code Section XI**

1. Owner F.E.N.O.C. Date 10/31/2007  
(NAME)  
76 South Main Street – Akron, OH 44308 Sheet 1 of 1  
(ADDRESS)

2. Plant Beaver Valley Power Station Unit No. 1  
(NAME)  
Shippingport, PA 15077 Work Order #200213878  
(ADDRESS) Repair/Replacement Organization P.O. No., Job No., etc.

3. Work Performed By BVPS Valve Team Type Code Symbol Stamp Not Applicable  
(NAME)  
Shippingport, PA 15077 Authorization No. N/A  
(ADDRESS) Expiration Date N/A

4. Identification of System Main Steam (Q2)

5. (a) Applicable Construction Code ANSI B31.1 1967 Edition, S'71 Addenda, N/A Code Case

(b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 1989

(c) Applicable Section XI Code Case(s) N/A

6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Globe Valve	Masoneilan	H-49378-264	N/A	HCV-IMS-104	1976	Corrected	No
Plug	Masoneilan-Dresser	N/A	N/A	HT #14464	2006	Installed	No

7. Description of Work Replaced stem assembly with plug

8. Tests Conducted: Hydrostatic\* ☐ Pneumatic\* ☐ Nominal Operating Pressure ☐ Exempt ☒  
 Other ☐ Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F

\*Record test pressure and temperature

## FORM NIS-2 (Back)

9. Remarks No Code Data Report available. Previous NIS-2 Data Report: 1568, 827, and 149.

Applicable Manufacturer's Data Reports to be attached

## CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/ACertificate of Authorization No. N/AExpiration Date N/A

Signed



Owner or Owner's Designee, Title

Senior Specialist Date November 14, 20 07

## CERTIFICATE OF INSERVICE INSPECTION

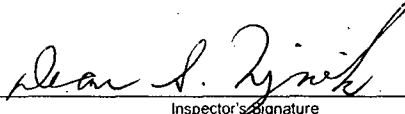
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Pennsylvania and employed by HSB CT of

Hartford, CT

have inspected the components described in this

Owner's Report during the period 4-18-06 to 10-24-07, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.



Inspector's Signature

Commissions

I, N, P 12384

National Board, State, Province, and Endorsements

Date 11-14-, 20 07

Form No. 2073

**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**  
**As Required by the Provisions of the ASME Code Section XI**

1. Owner F.E.N.O.C. Date 10/15/2007  
(NAME)  
76 South Main Street – Akron, OH 44308 Sheet 1 of 1  
(ADDRESS)

2. Plant Beaver Valley Power Station Unit No. 1  
(NAME)  
Shippingport, PA 15077 Work Order #200207316  
(ADDRESS) Repair/Replacement Organization P.O. No., Job No., etc.

3. Work Performed By BVPS Valve Team Type Code Symbol Stamp Not Applicable  
(NAME)  
Shippingport, PA 15077 Authorization No. N/A  
(ADDRESS) Expiration Date N/A

4. Identification of System Quench Spray (Q3)

5. (a) Applicable Construction Code ANSI B31.1 1967 Edition, S'71 Addenda, N/A Code Case  
 (b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 1989  
 (c) Applicable Section XI Code Case(s) N/A

## 6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Pipe Flange	Stone & Webster	N/A	N/A	QS-2	1976	Corrected	No

7. Description of Work Replaced piping flange studs and nuts.

8. Tests Conducted: Hydrostatic\* ☐ Pneumatic\* ☐ Nominal Operating Pressure ☐ Exempt ☒  
 Other ☐ Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F

\*Record test pressure and temperature

## FORM NIS-2 (Back)

9. Remarks No.Code Data Report available. Replaced flange 7/8" Studs: P.O. 45172981 Ht. #X374;

Applicable Manufacturer's Data Reports to be attached

Nuts: P.O. 45173478 / Ht. #X391.

## CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A

Expiration Date N/A

Signed



Owner or Owner's Designee, Title

Senior Specialist Date November 13, 20 07

## CERTIFICATE OF INSERVICE INSPECTION

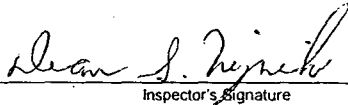
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors

and the State or Province of Pennsylvania and employed by HSB CT of Hartford, CT

have inspected the components described in this Owner's Report during the period 4-19-06 to

10-24-07 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.



Inspector's Signature

Commissions

I, N, PA 2384

National Board, State, Province, and Endorsements

Date

11-14-

, 20

07

Form No. 2074

**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**  
**As Required by the Provisions of the ASME Code Section XI**

1. Owner First Energy Corp. Date 10/3/07  
(NAME)  
Shippingport, PA. 15077 Sheet 1 of 1  
(ADDRESS)
2. Plant Beaver Valley Power Station Unit No. 1  
(NAME)  
Shippingport, PA. 15077 ECP-07-0300-01 (200284331)  
(ADDRESS) Repair/Replacement Organization P.O. No., Job No., etc.
3. Work Performed By BVPS Construction Type Code Symbol Stamp N/A  
(NAME)  
Shippingport, PA. 15077 Authorization No. N/A  
(ADDRESS) Expiration Date N/A
4. Identification of System Recirculation Spray (Code Class 2)
5. (a) Applicable Construction Code ANSI B31.1.0 1967 Edition, Summer 1971 Addenda, --- Code Case  
 (b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 1989  
 (c) Applicable Section XI Code Case(s): N-491-2

## 6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Pipe Support	Stone & Webster	N/A	N/A	IRS-S-1	1976	Corrected	No

7. Description of Work Remove columns adjacent to Containment liner and move columns on opposite side of platform to provide clearance for new sump strainer.

8. Tests Conducted: Hydrostatic\* ☐ Pneumatic\* ☐ Nominal Operating Pressure ☐ Exempt ☒  
 Other ☐ Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F

## FORM NIS-2 (Back)

9. Remarks No Code data report available

Applicable Manufacturer's Data Reports to be attached

## CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/ACertificate of Authorization No. N/AExpiration Date N/ASigned Willis R. Garman - Engineer

Owner or Owner's Designee, Title

Date 10/3, 20 07

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Pennsylvania and employed by HBT CT of Hartford, CT

have inspected the components described in this Owner's Report during the period 4-19-06 to 10-22-07, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Dean S. Lynch  
Inspector's Signature

Commissions

I, N, PA 2384  
National Board, State, Province, and Endorsements

Date 10-22-, 20 07

Form No. 2076

**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**  
**As Required by the Provisions of the ASME Code Section XI**

1. Owner F.E.N.O.C Date 11/15/2007  
(NAME)  
76 South Main Street – Akron, OH 44308 Sheet 1 of 1  
(ADDRESS)
2. Plant Beaver Valley Power Station (BVPS) Unit No. 1  
(NAME)  
Shippingport, PA 15077 Work Order #200200160  
(ADDRESS) Repair/Replacement Organization P.O. No., Job No., etc.
3. Work Performed By BVPS Construction Service Type Code Symbol Stamp N/A  
(NAME)  
Shippingport, PA 15077 Authorization No. N/A  
(ADDRESS) Expiration Date "
4. Identification of System River Water (Q3)
5. (a) Applicable Construction Code ANSI B31.1 1967 Edition, S'71 Addenda, N/A Code Case  
 (b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 1989  
 (c) Applicable Section XI Code Case(s): N-416-2

## 6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Ball Valve	BNL Industries	B021016-1-8	N/A	1RW-132	2003	Corrected	No

7. Description of Work Repaired pinhole cavity inside valve end piece.

8. Tests Conducted: Hydrostatic\* ☐ Pneumatic\* ☐ Nominal Operating Pressure ☒ Exempt ☐  
 Other ☐ Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F

\*Record test pressure and temperature

## FORM NIS-2 (Back)

9. Remarks No Code Data Report available. Previous NIS-2 Data Report No: 1571.


Applicable Manufacturer's Data Reports to be attached

## CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/ACertificate of Authorization No. N/AExpiration Date N/A

Signed



Owner or Owner's Designee, Title

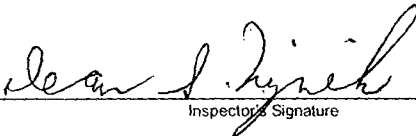
Senior Specialist

Date November 15, 20 07

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Pennsylvania and employed by HSB CT of Hartford, CT have inspected the components described in this Owner's Report during the period 4-19-06 to 10-24-07, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

  
Inspector's Signature

Commissions

I, N, 42384  
National Board, State, Province, and EndorsementsDate 11-19-, 20 07

Form No. 2077

**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**  
**As Required by the Provisions of the ASME Code Section XI**

1. Owner First Energy Corp. Date 10/16/07  
(NAME)  
Shippingport Pa, 15077 Sheet 1 of 1  
(ADDRESS)
2. Plant Beaver Valley Power Station Unit No. 1  
(NAME)  
Shippingport Pa, 15077 ECP 07-0310  
(ADDRESS) Repair/Replacement Organization P.O. No., Job No., etc.
3. Work Performed By Design Engineering Type Code Symbol Stamp N/A  
(NAME)  
Shippingport Pa, 15077 Authorization No. N/A  
(ADDRESS) Expiration Date N/A
4. Identification of System Feedwater System – (Q2)

5. (a) Applicable Construction Code ANSI B31.1 1967 Edition, S71 Addenda, None Code Case  
 (b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 1989  
 (c) Applicable Section XI Code Case(s): N/A

## 6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
WFPD-22	Southwest Fabricating & Welding Co.	None	None	None	1970	Rerated	No
WFPD-23	Southwest Fabricating & Welding Co.	None	None	None	1970	Rerated	No
WFPD-24	Southwest Fabricating & Welding Co.	None	None	None	1970	Rerated	No

7. Description of Work Rerating of feedwater piping between feedwater isolation valves and steam generators.

8. Tests Conducted: Hydrostatic\* ☐ Pneumatic\* ☐ Nominal Operating Pressure ☐ Exempt ☒  
 Other ☐ Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F

\*Record test pressure and temperature

## FORM NIS-2 (Back)

9. Remarks None. Exempt from Pressure Testing because the piping is being rated to a lower  
Applicable Manufacturer's Data Reports to be attached  
Pressure.

## CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A

Expiration Date N/A

Signed Charles D. Dintz Nuclear Engineer Date October 17, 20 07  
Owner or Owner's Designee, Title

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Pennsylvania and employed by HSB CT of Hartford, CT have inspected the components described in this Owner's Report during the period 4-19-06 to 10-17-07, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Dean S. Lynch Commissions I, N, PA 2384  
Inspector's Signature National Board, State, Province, and Endorsements

Date 10-17-, 20 07

Form No. 2086

**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**  
**As Required by the Provisions of the ASME Code Section XI**

1. Owner F.E.N.O.C Date 11/29/2007  
(NAME)  
76 South Main Street – Akron, OH 44308 Sheet 1 of 2  
(ADDRESS)
2. Plant Beaver Valley Power Station (BVPS) Unit No. 1  
(NAME)  
Shippingport, PA 15077 Work Order #200287233  
(ADDRESS) Repair/Replacement Organization P.O. No., Job No., etc.
3. Work Performed By BVPS Maintenance Type Code Symbol Stamp N/A  
(NAME)  
Shippingport, PA 15077 Authorization No. N/A  
(ADDRESS) Expiration Date "
4. Identification of System Ventilation/River Water (Q3)
5. (a) Applicable Construction Code Section VIII 1971 Edition, S'72 Addenda, N/A Code Case  
 (b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 1989  
 (c) Applicable Section XI Code Case(s): N/A

## 6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Heat Exchanger	York	I-2239	46531	1VS-E-4B	1972	Corrected	Yes

7. Description of Work
- Replaced end bell baffle plate and repaired areas of corrosion.

8. Tests Conducted: Hydrostatic\* ☐ Pneumatic\* ☐ Nominal Operating Pressure ☐ Exempt ☒  
 Other ☐ Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F

\*Record test pressure and temperature

## FORM NIS-2 (Back)

9. Remarks U-1 Data Report attached. The tube/end bell section of the heat exchanger was exempt  
Applicable Manufacturer's Data Reports to be attached  
to ASME Section VIII and was made to commercial grade. ANSI B31.1 was used as Construction  
Code for the weld repairs. Previous NIS-2 Data Report Nos: 1590, 1086, 348, and 196.

## CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date N/A

Signed [Signature] Senior Specialist Date November 29, 20 07  
Owner or Owner's Designee, Title

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Pennsylvania and employed by HSB CT of Hartford, CT have inspected the components described in this Owner's Report during the period 4-18-06 to 10-24-07, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature] Commissions NB9428 ANIB PA2384  
Inspector's Signature National Board, State, Province, and Endorsements

Date 11-30-, 20 07

# FORM U-1 MANUFACTURERS' DATA REPORT FOR PRESSURE VESSELS

F6-20-K

governed by the Provisions of the ASME Code Rules, Section VIII, Division I

1. Manufactured by YORK DIVISION, BORG-WARNER CORPORATION, YORK, PENNSYLVANIA - U.S.A.  
(Name and address of Manufacturer)

2. Manufactured for BEAVER VALLEY POWER STATION, SHIPPINGPORT, PENNSYLVANIA  
(Name and address of Purchaser)

3. Type Horiz. Kind Ht. Exch Vessel No. ( ) ( ) Natl. Bd. No. 46531 Yr. Built 1972  
(Horiz. or Vert.) (Tank, Jacketed, Heat Exch.) (Mfr. Serial) (State & State No.)

Items 4-9 incl. to be completed for single wall vessels (such as air tanks), jackets of jacketed vessels, or shells of heat exchangers.

4. SHELL Material SA-53-B T.S. 60,000 Nominal 5/16" Corrosion 0 In. Allowance 0 In. Diam. 15-3/8" Length 21 Ft. In.  
(Kind and Spec. No.) (Fig. or F.B. & Spec. Min. T.S.) Thickness In. (If riveted describe seams fully on reverse side of form.)

5. SEAMS Long Seamless H.T. No R.T. No Sectioned No Efficiency 100 %  
(Welded, Dbl., Single, Lap, Butt) (Yes or No) (Spot or Complete) (Yes or No)

6. HEADS (a) Material SA-53-B T.S. 60,000 (b) Material SA-53-B T.S. 60,000  
(Kind and Spec. No.) (Fig. or F.B. & Spec. Min. T.S.) (Kind and Spec. No.) (Fig. or F.B. & Spec. Min. T.S.)

Location Thickness Crown Radius Knuckle Radius Elliptical Ratio Conical Apex Angle Hemispherical Radius Flat Diameter Side to Pressure  
(Top, bottom, ends) (Convex or Concave)

(a) (b)

If removable, bolts used (Material, Spec. No., T.S., Size, Number) Other fastening (Describe or Attach Sketch)

7. STAY BOLTS (Material) If hollow (Size of Hole) Attachment (Threaded, Welded) Pitch (Horiz.) X (Vert.) Diam. (Nominal)

8. JACKET CLOSURE: (Describe as ogee & weld, bar, etc. If bar, give dimensions, if bolted, describe or sketch)

9. Constructed for max. allowable working press. 300 psi at max. temp. 250 °F. Min. Temp. (when less than -20°) 0 °F. Test 375 psi.  
(Pneumatic or Hydrostatic)

Items 10 and 11 to be completed for tube sections. SA-515-70 S.S. 304 SA-240 1/4" Clad

10. TUBE SHEETS: Stationary Material Steel Diam. 15-3/8" Thickness 1" In. Attachment Welded  
(Kind & Spec. No.) (Subject to Pressure) (Welded, Bolted)

Floating Material SA-240 Diam. 15-3/8" In. Thickness 1" In. Attachment Welded

11. TUBES: Material Stainless Steel SA-240 TP-304 O.D. 3/4" In. Thickness #16BWG or Gage Number 150 Type Straight  
(Kind & Spec. No.) (Straight or U)

Items 12-15 incl. to be completed for inner chambers of jacketed vessels, or channels of heat exchangers.

12. SHELL Material SA-53-B T.S. 60,000 Nominal 5/16" Corrosion 0 In. Allowance 0 In. Diam. 15-3/8" Length 21 Ft. In.  
(Kind and Spec. No.) (Fig. or F.B. & Spec. Min. T.S.) Thickness In. (If riveted describe seams fully on reverse side of form.)

13. SEAMS Long Seamless H.T. No R.T. No Sectioned No Efficiency 100 %  
(Welded, Dbl., Single, Lap, Butt) (Yes or No) (Spot or Complete) (Yes or No)

6. HEADS (a) Material SA-53-B T.S. 60,000 (b) Material SA-53-B T.S. 60,000  
(Kind and Spec. No.) (Fig. or F.B. & Spec. Min. T.S.) (Kind and Spec. No.) (Fig. or F.B. & Spec. Min. T.S.)

Location Thickness Crown Radius Knuckle Radius Elliptical Ratio Conical Apex Angle Hemispherical Radius Flat Diameter Side to Pressure  
(Top, bottom, ends) (Convex or Concave)

(a) Top, bottom, ends (b) Channel (c) Floating

If removable, bolts used (a) (b) (Material, Spec. No., T.S., Size, Number) Other fastening (Describe or Attach Sketch)

15. Constructed for max. allowable working press. 150 psi at max. temp. 150 °F. Min. temp. (when less than -20°) 0 °F. Test 100 psi.  
(Pneumatic or Hydrostatic)

Items below to be completed for all vessels where applicable.

16. SAFETY VALVE OUTLETS: Number 1 Size 1/2" Location Near end of shell

17. NOZZLES

Purpose (Inlet, Outlet, Drain)	Number	Diam. or Size	Type	Material	Thickness	Reinforcement Material	How Attached
Inlet	1	4"	Pipe	SA-53-B	Sch. 40	SA-515-70	Welded
Outlet	1	4"	Pipe	SA-53-B	Sch. 40	SA-515-70	Welded
Equal	1	1-1/4"	Coupling	SA-105-2	3,000 lb.		Welded
Purge	1	3/8"	Coupling	SA-105-2	3,000 lb.		Welded

<sup>1</sup> If postweld heat-treated.

<sup>2</sup> List under remarks other internal or external pressures with coincident temperature when applicable.

(Over)

18. INSPECTION Manholes, No. \_\_\_\_\_ Size \_\_\_\_\_ Location \_\_\_\_\_  
 OPENINGS: Handholes, No. \_\_\_\_\_ Size \_\_\_\_\_ Location \_\_\_\_\_  
 Threaded, No. \_\_\_\_\_ Size \_\_\_\_\_ Location \_\_\_\_\_  
 19. SUPPORTS: Skirt \_\_\_\_\_ Lugs \_\_\_\_\_ Legs \_\_\_\_\_  
 (Yes or No) (Number) (Number) (Number) Other (Describe) Attached (Where & How)

20. REMARKS: 16" x 7' Condenser - Refrigerant (Non-corrosive Service)  
Tube section code exempt U-1(d)(2)  
4" conn - weld end  
Hydrostatic test 450 psi before tubing  
SA-249 material conforms to UG-9

Constructed under the provisions of UG-90 (c)(2)

(Brief description of purpose of the vessel, as Air Tank, After Cooler, Jacketed Cooker, etc. State contents of each part.)

We certify that the statements made in this report are correct and that all details of design, material, construction, and workmanship of this vessel conform to the ASME Code for Pressure Vessels, Section VIII, Division 1.

Date August 7 1972

Signed YORK DIVISION BORG-WARNER CORP.,  
YORK, PENNA.  
 (Manufacturer)

H. L. Kam  
 Engineering Dept., Heat Exch.  
 Senior Engineer

Certificate of Authorization No. 875 Expires Dec. 31, 1972

### CERTIFICATE OF SHOP INSPECTION

VESEL MADE BY YORK DIVISION BORG-WARNER CORPORATION, YORK, PENNA. - U.S.A.

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province Pennsylvania and employed by Hartford Steam Boiler Insp. & Ins. Co. of Hartford, Connecticut have inspected the pressure vessel described in this manufacturer's data report on May 16 1972, and state that to the best of my knowledge and belief, the manufacturer has constructed this pressure vessel in accordance with the applicable sections of the ASME Boiler and Pressure Vessel Code.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the pressure vessel described in this manufacturer's data report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date August 7 1972

A. U. Casoff  
 Inspector's Signature

Commissions

Natl. Bd Comm. #3695

Natl Board, State, Province and No.

### CERTIFICATE OF FIELD ASSEMBLY INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province \_\_\_\_\_ and employed by \_\_\_\_\_ of \_\_\_\_\_

\_\_\_\_\_ have compared the statements in this manufacturer's data report with the described pressure vessel and state that parts referred to as data items \_\_\_\_\_ not included in the certificate of shop inspection have been inspected by me and that to the best of my knowledge and belief the manufacturer has constructed and assembled this pressure vessel in accordance with the applicable sections of the ASME Boiler and Pressure Vessel Code. The described vessel was inspected and subjected to a hydrostatic test of \_\_\_\_\_ psi.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the pressure vessel described in this manufacturer's data report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date \_\_\_\_\_ 19\_\_\_\_

Inspector's Signature

Commissions

Natl Board, State, Province and No.

Form No. 2087

**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**  
**As Required by the Provisions of the ASME Code Section XI**

1. Owner F.E.N.O.C Date 11/13/07  
(NAME)  
76 South Main Street – Akron, OH 44308 Sheet 1 of 2  
(ADDRESS)
2. Plant Beaver Valley Power Station (BVPS) Unit No. 1  
(NAME)  
Shippingport, PA 15077 PO #7024829  
(ADDRESS) Repair/Replacement Organization P.O. No., Job No., etc.
3. Work Performed By Beaver Valley/Westinghouse Type Code Symbol Stamp N/A  
(NAME)  
Shippingport, PA 15077 Authorization No. N/A  
(ADDRESS) Expiration Date N/A
4. Identification of System Reactor Coolant System
5. (a) Applicable Construction Code ASME Section III 89 Edition, No Addenda Code Case N/A  
 (b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 1989 Edition, No Addenda  
 (c) Applicable Section XI Code Case(s): N/A

## 6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
IRC-E-1C	Westinghouse	NP030651/ 3MB2	84	N/A	2005	Corrected	Yes

7. Description of Work Installed two tube plugs (Alloy 690) in one SG tube. Replaced hot leg primary  
manway stud (#CH7).

8. Tests Conducted: Hydrostatic\* ☐ Pneumatic\* ☐ Nominal Operating Pressure ☒ Exempt ☐  
 Other ☐ Pressure N/A psi Test Temp. N/A °F

\*Record test pressure and temperature

## FORM NIS-2 (Back)

9. Remarks Primary side work order - 200211850

Applicable Manufacturer's Data Reports to be attached

Performed VT-1 examination on all studs, nuts, washers, insert plates & gasket seating surfaces.

## CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/ACertificate of Authorization No. N/AExpiration Date N/ASigned Gary Alberti, Project Manager

Owner or Owner's Designee, Title

Gary Alberti

Date

11/27, 20 07

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Pennsylvania and employed by HSB CT of Hartford, CT have inspected the components described in this

Owner's Report during the period 4-19-06 to 10-24-07, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Dean S. Hirsch

Inspector's Signature

Commissions

NB 9428 ANIB PA 2384

National Board, State, Province, and Endorsements

Date 11-30-, 20 07